University College Dublin
National University of Ireland, Dublin

Medicine

Session 2003/2004

Contents

Degrees in Medicine
Extract from the Statute of the University

The University may grant the following degrees to students who, under conditions laid down in the statutes and regulations, have completed approved courses of study, and have passed the prescribed examinations of the University and fulfilled all other prescribed conditions.

In the Faculty of Medicine:

Bachelor of Medicine (MB), Bachelor of Surgery (BCh), Bachelor of Obstetrics (BAO)
Bachelor of Science (Nursing) *
Bachelor of Science (Physiotherapy) *
Bachelor of Science (Radiography)*
Bachelor of Medical Science (BMedSc)
Bachelor of Science (BSc) in Medical Subjects

Master of Surgery (MCh)
Master of Obstetrics (MAO)
Master of Public Health (MPH)
Master of Science (MSc)

Doctor of Medicine (MD)
Philosophiae Doctor (PhD)

The Degrees of MB, BCh and BAO shall be granted only at the same time. A student shall not be eligible to obtain these degrees unless he/she:

(a) shall have completed the prescribed course of study in the Faculty of Medicine, extending over a period of not less than five academic years from the date of his/her registration as a student of Medicine by a Medical Registration Authority established or recognised by law; and

(b) shall have passed the prescribed examinations.

* For details, see separate booklets, Nursing and Midwifery, Physiotherapy, Radiography.

Undergraduate Degrees

Degrees of Bachelor of Medicine (MB), Bachelor of Surgery (BCh), Bachelor of Obstetrics (BAO)

Introductory Information

Note: Courses of study required for qualification to practice Medicine are controlled by law in a number of Acts relating to Medicine.

Admission Requirements
Information on the application procedure may be obtained from the Central Applications Office, Tower House, Eglinton Street, Galway; (telephone: 091-509800) information on admission requirements may be obtained from the Admissions Office, University College Dublin, Belfield, Dublin 4 (telephone: 01-7161425/1426).

Candidates for admission will be required to pass a medical health assessment prior to admission and from time to time thereafter in accordance with the health policy of the Faculty of Medicine. The assessment will be carried out by the University Student Health Service and will include testing for hepatitis B and tuberculosis.

Registration
On entry to Medicine the student is registered as a medical student at the Office of the Medical School and subsequently must pursue a period of five/six years' study, at the end of which, having passed the requisite examinations, he/she may become registered as a medical practitioner. Registration with the University is mandatory during all of the undergraduate years. Doctors who wish to practice in the Republic of Ireland must then register with the Irish Medical Council. To practice in Great Britain and Northern Ireland, registration with the General Medical Council is necessary.

Attention is particularly directed to the fact that graduates who have passed the final or qualifying examinations are not entitled to full registration until they have served for one year as resident medical officer at a hospital or hospitals recognised for the purpose. The University does not assume responsibility for these appointments for graduates. Before taking up such hospital appointments, provisional registration must be obtained from the Irish Medical Council.

Introductory Lecture for Medical Students
Advisory meetings will be held for students entering the Medical School. Students are strongly advised to attend these meetings which are held before the Michaelmas term begins. Details will be sent to students early in Autumn.

Dates of Terms

The 2003/2004 medical session is as follows:

Michaelmas Term: Monday, 15 September 2003 – Friday, 05 December 2003
(First Semester)

Hilary and Trinity Terms: Monday, 05 January 2004 – Friday, 27 February, 2004
(Second Semester) Monday, 22 March, 2004 – Friday, 16 April 2004

Summary of Courses

Computer Aided Learning
The Medical Faculty has a large Computer Aided Learning facility (CAL), with one hundred high-end multimedia networked computers, with internet access. Computer aided learning is used to augment traditional methods in many subjects. Students are encouraged to use the facility for self-directed interactive learning. Online facilities include teaching packages for many subjects with self-evaluation modules. Students are encouraged to search for and utilise resources on the World Wide Web.

New Curriculum

Foundation Year of Medicine (New Curriculum)
The required courses of study for the Foundation Year of Medicine are Biology, Chemistry, Clinical Science, Experimental Physics.

Systems One – Human Biology
There are eight subjects in this course which is given over three semesters, two semesters in First Year and one semester in Second Year.

First Medical Year – Semesters 1 and 2
The subject of the first semester (Systems One) is
Basic Concepts

The subjects of the second semester (Systems One) are:
Personal and Population Health 1
Cardiovascular Biology
Respiratory Biology
Renal Biology

Second Medical Year – Semester 1
The subjects of the third semester (Systems One) are

Personal and Population Health 2
Gastrointestinal and Liver Biology
Neurosciences/Locomotor Biology
Endocrine/Reproductive Biology

Systems Two – taught in Semester 2 (Second Year) and Third Year.
Biology of Disease States

There are ten subjects in this course, which is given over two semesters, second semester of 2nd Medical Year and first semester of 3rd Medical Year.

Second Medical Year – Semester 2
The subjects of Systems 2 are

Basic mechanisms of disease

Cardiovascular diseases

Respiratory diseases

Fourth Year of Medicine
The required courses of study for the Fourth Year of Medicine are Medical Microbiology and Pathology II (Systematic Pathology).

Fifth and Sixth Years of Medicine
During the fifth and sixth years, systematic instruction is given in Medicine with Therapeutics, Public Health Medicine and Epidemiology, General Practice, Legal Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Ophthalmology, Oto-Laryngology and Ethics.

From March of the fourth year of medicine and during the fifth and sixth years, the clinical courses at the teaching hospitals must be attended.

Examinations, Subjects and Courses of Instruction[**]

University Examination of the Foundation Year of Medicine
Candidates for admission to the Foundation Examination in Medicine must have attended the prescribed course of instruction. The subjects for examination are Biology, Chemistry, Clinical Science and Experimental Physics. A proportion of the examination marks in each subject may be allocated to the year's work. The examination is held in Summer and in

[**] Published dates of examinations are in all cases subject to modification.

Autumn, and must be passed before entering on the courses of the First Medical Year (New Curriculum).

The Foundation Year of Medicine Examination must be passed within two years from the date of entering for the course.

First Medical Year Examination (New Curriculum)
The subjects for examination are Basic Concepts, Personal and Population Health 1, Cardiovascular Biology, Respiratory Biology, Renal Biology.

The examination is held in the summer with a repeat examination in the autumn. A further repeat examination may be held in the winter. Each subject will be examined by end of year written examination and by continuous assessment. Normally, the examination may be attempted only four times. Candidates for admission to the Examination must have attended the prescribed courses. In particular, satisfactory attendance is required at practical teaching sessions and tutorials. Candidates who fail the examination in both summer and autumn, are required to re-attend the respective courses in the following session before re-entering for the examination. However, a candidate who fails only one may carry it forward to the following winter examination. If still unsuccessful a candidate will have to withdraw from the Second Medical Year and repeat the subject and examination in the First Medical Year.

Second Medical Year Examinations (New Curriculum)
There are two examinations in the Second Medical Year:

(1) Systems One Examination
The subjects for examination are Gastrointestinal and Liver Biology, Endocrine/ Reproductive Biology, Neuroscience/Locomotor Biology and Personal and Population Health 2.

The examination is held in winter of the first semester with a repeat examination in the summer. A further repeat examination may be held in the autumn. Each subject will be examined by written examination and by continuous assessment. Normally, the examination may be attempted only four times. Candidates for admission to the Examination must have attended the prescribed courses. In particular, satisfactory attendance is required at practical teaching sessions and tutorials. The Systems One Examination must be passed before commencing the Third Medical Year. Candidates who fail Systems One Examination in the Second Medical year, must re-attend the respective Systems One subjects and examinations in the following year.

(2) Systems Two Examination
The subjects for examination in Systems 2 for the Second Medical Year are Basic mechanisms of disease, Cardiovascular diseases and Respiratory Diseases. Each of the subjects of Systems 2 will be examined by a written paper at the end of the semester and by continuous assessment comprising practical, CAL and MCQ assessments.

University Examination of the Fourth Year of Medicine
The courses of instruction and subjects of examination are: Pathology II (Systematic Pathology) and Microbiology.

The examination is held in Spring of the fourth year, with a repeat examination in the Summer. Students who fail to complete the Fourth Year of Medicine Examination in the Summer are required to re-attend the respective courses in the following session before re-entering for the examination. They must also cease their clinical clerkship in the hospitals.

In addition to attending during the fourth year the prescribed courses in preparation for the Fourth Examination, students attend courses during the Trinity term in preparation for the Fifth and Sixth Medical Examinations.

The Fourth Year of Medicine must be passed before registering for the Fifth Year of Medicine.

University Examination of the Fifth Year of Medicine
The courses of instruction and subjects of examination are: Public Health Medicine and Epidemiology, Legal Medicine, Ophthalmology, Otolaryngology, General Practice and Ethics. The examination is held in February with a repeat examination in the Summer.

The Fifth Year of Medicine must be passed before presenting for the Final Medical Examination, Part I, except in special circumstances and with the permission of the Faculty.

Final Examination for Degrees in Medicine
The courses of instruction and subjects of examination are: Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Psychiatry.

The examination is divided into two parts: Part I – Obstetrics and Gynaecology, Paediatrics and Psychiatry, held in the Winter of the final year; and Part II – Medicine and Surgery, held in April of the final year. Part I must be presented for before Part II of the Final Medical Examination. Candidates for the Final Medical, Part II Examination must have completed three years of clinical study after the second medical year. A period of nine months must elapse between the Fifth Year of Medicine Examination and the Final Medical Part II Examination. All final medical subjects may be passed separately. An assessment of the nine month junior clerkships in Medicine and Surgery will contribute towards the marks in the Final Medical Examination in those subjects.

Exemptions in all subjects will hold for a period of two years. *Candidates who fail in Medicine, Surgery or Obstetrics and Gynaecology are required to re-attend hospital courses in that particular subject for the term or terms before again presenting themselves for examination.* Candidates must pass the Final Medical Examination within three years of passing the Fifth Year of Medicine Examination. Exemption from this regulation will be granted only for grave reasons and with the permission of the Faculty.

Honours in the Final Medical Examination are only awarded when the subjects Medicine, Surgery, Obstetrics and Gynaecology, Psychiatry and Paediatrics are passed in their proper groupings and the total marks in these subjects reach the necessary level for First or Second

Class Honours. in addition, honours (First and Second Class) may be awarded in the following individual subjects: Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Psychiatry, provided that they are passed at the first attempt, the award to be classed as a pass degree.

Candidates who pass all the subjects of the Final Examination are eligible for *provisional registration.* It is absolutely essential to register with the appropriate body before taking up a professional post. Registration for the Republic of Ireland can be carried out at the Medical Council, Portobello Court, Lower Rathmines Road, Dublin 6 (telephone: 01-4965588).

Clinical Attendance
The attendance of students at clinical courses in the general and specialist hospitals affiliated to the University must be certified by the hospitals before proceeding to the relevant examinations. The relevant certification is:

1 Attendance at a general hospital as a Junior Clerk for nine months, rotating through the specialities of Medicine and Surgery and including a two week attachment in Gynaecology. (Fifth Year of Medicine Examinations)

2 Attendance at clinical instruction in the Ear, Nose and Throat Department of the affiliated hospital. (Fifth Year of Medicine Examinations)

3 Attendance at clinical instruction in Ophthalmology (Fifth Year of Medicine Examinations)

4 Attendance at a clinical attachment in General Practice (Fifth Year of Medicine Examinations).

5 Attendance at an eight week clinical clerkship in Obstetrics and Gynaecology in the affiliated specialist hospitals (Final Medical Examination Part I).

6 Attendance at a two month clinical clerkship in Paediatrics in the affiliated specialist hospitals (Final Medical Examination Part I).

7 Attendance at an eight week clinical clerkship in Psychiatry in the affiliated specialist hospitals (Final Medical Examination Part I).

8 Attendance at an orthopaedic hospital (Final Medical Examination Part II).

9 Attendance at a general hospital as a senior clerk, rotating through medicine and surgery for four months prior to the Final Medical Examination Part II.

Note: Each hospital/department will issue guidelines with regards to appropriate student behaviour in each clinical setting in order to safeguard patient privacy and to ensure a policy of dignity and respect in clinical interactions involving students.

Examinations – General Regulations
A student failing to pass any of the above examinations within the specified period will be ineligible to proceed further with his/her medical studies in any NUI constituent university.

Exemptions to this rule will be granted by the Academic Council, on the recommendation of the Medical Faculty, only for very serious reasons, such as prolonged illness.

European Credit Transfer System (ECTS)

Credit Scheme for MB, BCh, BAO Degree Programme

Foundation Year

Course No:	*Course Title:*	*Credits:*
1-MED-102-Biol	Biology	
1-MED-103-Chem	Chemistry	
1-MED-104-ExPh	Experimental Physics	
1-MED-107-Epct	Clinical Science	
	Total	60

First Medical Year and Second Medical Year (New Curriculum). Because of the structure of the Systems 1 and Systems 2 courses it has not as yet been possible to identify comparable courses in the other institutions of the ECTS. This matter is under ongoing review.

Fourth Year of Medicine

Course No:	*Course Title:*	*Credits:*
4-MED-414-MeMi	Medical Microbiology	14
4-MED-415-Path-II	Pathology II	20
4-MED-416-GP-I	General Practice	4
4-MED-417-LMed-I	Legal Medicine I	4
4-MED-418-Med-I	Medicine I	7
4-MED-419-PHME-II	Public Health Medicine and Epidemiology II	4
4-MED-420-Surg-I	Surgery I	7
	Total	60

Fifth Year of Medicine

Course No:	*Course Title:*	*Credits:*
5-MED-521-GP-II	General Practice	4
5-MED-522-LMed-II	Legal Medicine II	2
5-MED-523-MEth	Medical Ethics	2
5-MED-524-Med-II	Medicine II	7
5-MED-525-ObGy-I	Obstetrics and Gynaecology**	13
5-MED-526-Opht	Ophthalmology	5
5-MED-527-OtoL	Otolaryngology	5
5-MED-528-Paed-I	Paediatrics**	13
5-MED-529-Psych-I	Psychiatry**	13
5-MED-530-PHME-III	Public Health Medicine and Epidemiology III	2
5-MED-531-Surg-II	Surgery II	7
	Total	60

** Only two of these three subjects may be taken in the year.

Sixth Year of Medicine

Course No:	*Course Title:*	*Credits:*
6-MED-632-Med-III	Medicine III	22
6-MED-633-Surg-III	Surgery III	22
6-MED-634-PHME-IV	Public Health Medicine and Epidemiology IV	3
6-MED-635-ObGy-II	Obstetrics and Gynaecology*	13
6-MED-636-Paed-II	Paediatrics*	13
6-MED-637-Psyc-II	Psychiatry*	13
	Total	60

* Only one of these three subjects may be taken in the year.

Syllabus of Courses for the Degrees of MB, BCh, BAO

Foundation Year of Medicine Courses

Biology (BIOL 1003)

Lectures: 26 hours; Practicals: 6 hours.

Introduction to vertebrates, invertebrates of medical importance, parasitology, comparative physiology, ecology, conservation, chemical pollutants, acid rain and their effects on health, genetics (including DNA), recombinants and their importance in medicine, aspects of anthropology.

Practicals: Invertebrates and parasitology.

Chemistry (CHEM 1006)

Lectures: 64 hours; Practicals: 18 hours.

Three lectures and one practical class each week.

Lectures: Fundamentals of chemical theory. Atomic structure. Electronic theory of valency. Periodic classification. Basic physical chemistry. Co-ordination chemistry of medically important compounds. Elementary study of organic chemistry. Throughout the course, stress is laid on points of interest to students of Medicine.

Laboratory: Simple experiments to train students in correct handling of chemicals, measurement and observation of chemical changes. Gravimetric, volumetric and qualitative analysis.

Clinical Science (GPRS 1001)

Lectures: 20 hours.

An introductory course in basic biological sciences illustrating clinical applications.

Molecular Biology

The Foundation Year Clinical Sciences Molecular Biology course provides an introduction to studies of gene expression, its regulation and application to human disease.

Human Genetics

The Human genetics course in the clinical science foundation year focuses on the practical clinical application of basic genetics, and how new genetic technology is used in the management of families with genetic disorders.

Experimental Physics (EXPH 1006)

Lectures: 65 hours; Practicals: 20 hours.

1. Elementary kinematics. Motion in a circle. Statistics and dynamics. Levers. The centrifuge. Elementary hydrostatics and hemostatics. Measurement of pressure.

2. Elasticity. Surface tension. Fluid flow. Osmosis.

3. Heat. Temperature and expansion. Calorimetry. Change of state. Properties of gases and vapours. Heat transfer. Conservation of energy. Elementary kinetic theory.

4. Simple harmonic motion. Wave motion. Sound. Vibrations of strings and air columns. Musical sounds. Physics of speech and hearing. Ultrasound.

5. Light. Photometry. Reflection and refraction. Image formation by lenses and mirrors. Introduction to wave theory and wave phenomena. Optical instruments with special reference to the microscope and the physical properties of the eye. Infra-red and ultra-violet radiation. Emission and absorption spectra. Lasers.

6. Elementary electrostatics. Properties of dielectrics. Current electricity. Electrolysis. Magnetic field of electric currents. Electric measuring instruments. Thermoelectric effects. Electro-magnetic induction. Alternating currents with special reference to high frequency currents.

7. The electron. Photoelectric and thermionic effects. Motion of charged particles in electric and magnetic fields. The oscilloscope and electrocardiograph. The electron microscope. Magnetic Resonance Imaging (MRI).

8. Atomic structure. Production and properties of X-rays. CAT scanning. Radioactivity. Nuclear radiations. Nuclear reactions. Production and use of radioisotopes. Interaction of nuclear radiations with matter. Health physics. Radiation dosage. Radiation protection and shielding.

Laboratory: Measurement of the physical quantities encountered in the lecture course.

First, Second & Third Medical Year Courses

Systems 1 – Normal Human Biology

First Medical Year, Semesters 1&2
Second Medical Year, Semester 1

Systems One – Human Biology
There are eight subjects in this course

1. Basic Concepts **MDRD 1002**

This subject is designed to equip students with the necessary background information and general biological and informatics concepts to understand the systems-based subjects in the later semesters of the Systems 1 course.

The upper limb will serve as a model to provide illustrative and clinically relevant examples of important general principles. The core concepts are :

Biological Physics – Biomechanics, Physics of air and blood flow, Biophysics of membrane potential and action potential, Gas laws, diffusion and osmosis, Physics of heat, light and sound

Histology and physiology of the four primary tissues – Cell structure and cycle, Connective tissue, Epithelia and epithelial transport, Muscle and regulation of muscle contraction, Nerve and cell-to-cell communication.

Anatomy of the upper limb – Structure of skin, nerve, muscle and bone. Structure of blood vessels and lymphatics. *Biomechanics, principles of imaging.*

Cellular biochemistry – Enzymes and catalysis, Carbohydrate metabolism, TCA cycle, Oxidative phosphorylation, Lipid metabolism, Nitrogen metabolism: Transmission of genetic information.

Introduction to Embryology – Gametogenesis, Fertilization and implantation, Formation of the basic structure of the human body.

Clinical Science – Introduction to patients in their own environment (early patient contact)

Personal and Population Health – Introduction to the concept of the patient in the community.

Healthcare Informatics – Introduction to Healthcare Informatics, use of Information and Communication Technology (ICT) tools in sourcing, critically analysing, managing and presenting medical information. Legal issues in Medical ICT.

2. Personal and Population Health 1 and 2 **MDRD 1003**

The subject explores in broad outline health promotion and the prevention of disease and the organisation and delivery of health care. Behavioural and sociological aspects of the interaction between the individual and healthcare professions are examined. Elements of this subject are included with Basic Concepts and the Biology courses. It includes contributions from Public Health Medicine and Epidemiology, Healthcare Informatics, General Practice, and Sociology.

Topics include: Food and nutrition in health and disease; water and water-borne disease; air pollution and air-borne disease; disease transmitted by animals; the influence of the home and place of work on health; accidents; health and personal behaviour; smoking, physical activity, alcohol, drugs, sexually transmitted disease. Measurements of health and disease; death rates.

The biological systems subjects 3-8 are taught in the second and third semester, with contributions from Anatomy, Physiology (including Functional Histology), Biochemistry, Clinical Science and Healthcare Informatics. The courses will include integrated community, primary care and hospital-based clinical, pathological and radiological illustrations and instruction in clinical skills.

3. Cardiovascular Biology **MDRD 1004**

Anatomy of the heart and mediastinum. Mechanical function of the heart as a pump. Electrocardiography.

Anatomy of carotid and abdominal and lower limb vasculature. Autonomic nervous system. Regulation of cardiac performance. Blood cells, blood biochemistry, endothelial function, haemostasis and fibrinolysis. Microcirculatory function. Control of blood pressure. Physiology of coronary and cerebral circulations. Analysis and presentation of material: Introduction to peer-reviewed medical sites. Making a presentation on cardiovascular medicine.

4. Respiratory Biology **MDRD 1005**

Anatomy of the respiratory tract and thorax. Functional histology of the respiratory tract. Muscles of the thoracic cage and mechanics of respiration. Oxygen transport. Haemoglobin. Carbon dioxide transport. Acid-base biochemistry. Pulmonary circulation and gas exchange. Presentation of material : making a multimedia presentation on respiratory medicine.

5. Renal Biology **MDRD 1006**

Anatomy of the kidney. Body fluid compartments. Physiological functions of the kidney. Renal regulation of water and electrolyte balance. Renal contribution to acid-base balance. Formation and excretion of urea and uric acid. Database use : management of a GU Database, use of databases in Medicine.

6. Gastrointestinal and Liver Biology **MDRD 2001**

Anatomy of the oral cavity, GI tract and peritoneum. Salivary glands and swallowing. Motility of GI tract and its control. Gastric secretion. Pancreas: structure and function. Liver: anatomy histology, physiological and metabolic function. Digestion and digestive enzymes, intestinal and biliary secretion. Absorption. Metabolic rate, control of food intake, obesity. Imaging technology. Imaging of the GI system.

7. Endocrine/Reproductive Biology **MDRD 2002**

Hormones and their classification: steroid, amine and peptide hormones. Molecular mechanisms of signal transduction. Hypothalamus and pituitary: anatomy and physiology. Structure and function of thyroid, parathyroid, thymus. Pancreas. Diabetes. Anatomy of adrenal glands and kidney. Adrenal function.

Anatomy of perineum and inguinal regions. Anatomy and histology of male and female reproductive systems. Reproductive hormones. Expert Systems/Decision Support Systems : use of an endocrine Decision Support System.

8. Neuroscience/Locomotor Biology **MDRD 2003**

Sensation and sensory pathways. Muscle tone. Medulla oblongata and cranial nerves. Pneumotaxic and cardiovascular centres. Pons and midbrain. Auditory system. Cerebral cortex. Diencephalon and thalamocortical projections. Sleep. Basal ganglia. Cerebellum. Visual system. Limbic system. Blood supply and venous drainage of brain and cord. Cerebral metabolism. Introduction to Psychology, the mind and behaviour.

Connective tissue of locomotor system. Collagen biochemistry. Skeletal muscle. Vertebral column and back muscles. Control of posture. Hip, knee and ankle joints. Muscles of the lower limb. Biomechanics of normal and abnormal gait. Neural control of locomotion.. Artificial Neural Networks/Artificial Intelligence.

Systems 2 – Biology of Disease States

Second Medical Year, Semester 2
Third Medical Year, Semester 1

Systems 2 – Biology of Disease States

This course will be taught over 2 semesters: second medical year, semester 2 and third medical year, semester 1. The subjects of the first semester are:

Basic mechanisms

Diseases affecting the cardiovascular system

Diseases affecting the respiratory system

The subjects of the second semester are:

Diseases affecting the gastrointestinal/hepatobiliary systems
Diseases affecting the renal system
Diseases affecting the central nervous system, locomotion and skin
Diseases affecting endocrine/reproductive systems
The foetus and childhood
Haematopathology/transplantation

Basic Mechanisms:
This course is designed to equip students with the necessary background information and general microbiological, pathological and pharmacological concepts to understand the system-based modules, which follow.

Systems-Based Subjects:
The system-based subjects are based on the major biological systems with integrated contributions from microbiology, pathology and pharmacology. The subjects are:

Diseases affecting the cardiovascular system
Diseases affecting the respiratory system
Diseases affecting the gastrointestinal/hepatobiliary systems
Diseases affecting the renal system
Diseases affecting the central nervous system, locomotion and skin
Diseases affecting endocrine/reproductive systems

Additional Subjects:
These subjects involve specialised consideration of disease states and/or patient subgroups where multiple systems may be involved. The subjects are:

The foetus and childhood
Haematology/transplantation

Examinations
The courses for examination are Basic mechanisms, Diseases affecting the cardiovascular system, Diseases affecting the respiratory system, Diseases affecting the gastrointestinal/ hepatobiliary systems, Diseases affecting the renal system, Diseases affecting the central nervous system, locomotion and skin, Diseases affecting endocrine/reproductive systems, The foetus and childhood and Haematology/transplantation. The examination is held in December with a repeat examination in the spring. A further repeat examination may be held in the summer. Each subject in the course will also be examined by continuous assessment at intervals during each semester.

Second Medical Year – Semester 2

Third Medical Year – Semester 1

Systems 2 – Biology of Disease States

There are nine subjects in this course

1. Basic mechanisms

The course, which is given in semester 2 of the second medical year, will focus on the core concepts involved in understanding infection, disease mechanisms and drug therapy. The core concepts to be taught include:

- Basic cellular pathology – Cell behaviour in disease
- Thrombosis, embolism and shock
- Inflammation – Acute and chronic inflammation, healing and repair
- Basic principles in pharmacology – Pharmacodynamics and pharmacokinetics, introduction to autonomic pharmacology, new drug development, toxicology
- Introduction to microorganisms and antimicrobial treatment – Introduction to the structure and replication of microorganisms, basic principles of chemotherapy, drug treatment of injections
- Immunology – Non-specific and specific immunity, infection transmission, pathological consequences of infection, hypersensitivity, autoimmunity, immunodeficiencies
- Introduction to neoplasia and anti-cancer treatment – Carcinogenesis, tumour classification and behaviour, molecular pathology, drug treatment of cancers
- Genetics – Human inheritance, molecular basis of genetic disorders, cytogenetic diagnosis and genetic counselling

2. Diseases affecting the cardiovascular system

The pathological basis and drug treatment of atherosclerosis, coronary heart disease, hypertension, heart failure. The pathological and microbiological basis of valvular heart disease.

3. Diseases affecting the respiratory system

Obstructive airways disease and its drug management, respiratory infections including tuberculosis, anti-tubercular drugs, interstitial lung disease, respiratory failure, tumours of the respiratory tract, drug toxicity.

4. Diseases affecting the gastrointestinal/hepatobiliary system

Upper G.I. tract, stomach, small and large bowel pathologic conditions. Drug treatment of hyperacidity, gastroenteritis and anti-diarrhoeal agents, acute and chronic hepatic injury,

infectious agents and hepatitis, drug-induced liver damage, cirrhosis and liver failure, diseases of the biliary tree, gall bladder and pancreas, jaundice and liver function tests.

5. Diseases affecting the renal system
Microbiological basis and pathological consequences of urinary tract infections, drug treatment of urinary tract infections, calculi, glomerular nephritis, renal tract tumours, renal failure, renal function tests, diuretic agents, drug toxicity.

6. Diseases affecting the central nervous system, locomotion and skin
Central nervous system - Brain trauma, strokes, neurodegenerative diseases and their treatment, neuromuscular diseases and their treatment, demyelinating diseases, infections in the CNS, brain tumours, drugs and the autonomic nervous system, drug treatment of psychiatric conditions, analgesics, general anaesthetic agents.

Locomotion - Arthritis, osteomyelitis, rheumatoid disease, ant-rheumatoid drugs and non-steroidal anti-inflammatory drugs. Metabolic bone disease: causes, consequences and treatment.

Skin - bone and soft tissue tumours, skin neoplasms and infections

7. Diseases affecting the endocrine/reproductive systems
Endocrine system - Benign breast disease, breast cancer and its drug treatment, thyroid, pituitary and adrenal diseases and their treatments, investigation of endocrine disease, diabetes mellitus and its treatment.

Reproductive system – Pathology of sexually transmitted infections of male and female genital tracts, microbiology, pathology and treatment of HIV infection, contraception, anti-hormones and cancer

8. Foetus and childhood
Pathology of neonatal period and childhood, congenital infections, teratogenesis, immunisation, management of poisoning events

9. Haematopathology/transplantation
Anaemia and anti-anaemic agents, leukemias, myeloproliferative disease, myelomas, lymphomas, infectious agents in the immune-compromised host, systemic haematological infections, anti-malarial agents, bleeding and clotting disorders, anti-coagulants, immunohaematology and transplantation, immunosuppression.

Fourth Year of Medicine Courses

Microbiology (MEMI 4001)
This course extends from the Michaelmas term to February of the Fourth Year in conjunction with Pathology. It consists of lectures, tutorials, practicals and demonstrations. The clinical aspects of the subject are emphasised and stress is laid on the investigation and prevention of the spread of disease caused by micro-organisms. Hospital classes are organised in which clinical teachers take part, the purpose of the course being to acquaint the student with the importance of micro-organisms in present-day medicine.

Pathology II (Systematic Pathology) (PATH 4001)
The Fourth Medical Pathology course is designed to provide students with an understanding of the pathologic and pathophysiologic basis of disease. The course comprises the following modules:

1) Lectures (approx. 100 hours) to cover:
   a) general pathology/mechanisms of disease, and
   b) systemic (organ-specific) pathology.
2) Tutorial-based problem-solving exercises. Application of pathology and laboratory medicine to clinical problems.
3) Hospital demonstrations. Post mortems, macroscopic and microscopic pathology.
4) Computerised interactive videodisk self-instruction.
5) Museum-based demonstrations.
6) Histopathology (microscopy) practicals.

In addition to the above, the clinical departments in both hospitals give weekly clinical case demonstrations. Where possible, these complement the weekly pathology topics.

Fifth and Final Years of Medicine Courses

Public Health Medicine and Epidemiology **(PHME 5001)**

Trinity term of Fourth Year; Michaelmas and Hilary terms of Fifth Year.
The course consists of about thirty formal lectures and fifteen units of hospital teaching in the affiliated hospitals.

The formal lecture course covers the following topics: The influence on health of the social and physical environment, with special emphasis on the preventive approach; epidemiology and statistics; international health agencies; the control of communicable disease; occupational health; community services for vulnerable groups; the influence of heredity on health; the education of the public in health.

Case presentations in clinical epidemiology are held in the affiliated hospitals. The presentations demonstrate to students the importance of epidemiology and the medical and social aspects of disease. in addition, students are taught how to use health and other social services in relation to particular patients.

A multiple choice examination is held in the Michaelmas term and marks gained in this examination contribute to the overall score in the University examination in Public Health Medicine and Epidemiology.

Hilary Term of Final Year
Six lectures are given to Final Year students in the Hilary term.

Legal Medicine **(FMED 5001)**

Trinity term of Fourth Year; Michaelmas and Hilary terms of Fifth Year.
The course consists of thirty lectures in the areas of medical law, clinical forensic medicine, thanatology and forensic pathology, prescribing law and toxicology. The aim of the course is to give the student doctor a working knowledge of medico-legal matters pertinent to present-day and future medical practice, including the legal obligations of registered medical practitioners.

The legal framework of the doctor's relationships with patients, colleagues, the Medical Council, employers, Government departments, the legal profession, the Courts and the Coroner will be examined and illustrated by relevant examples. The various statutes, possible reforms of the law in relation to medical negligence, and relevant cases from the Courts and European Union laws relating to these topics will be discussed.

The principles of clinical forensic medicine will be examined. These will include death certification, forensic psychiatry, medico-legal aspects of alcohol consumption, sexual crimes and genetic profiling. The study of thanatology and forensic pathology will include changes found after death, the doctor's role at the scene of death, forensic medical examination and the findings in suspicious deaths.

The general principles of poisoning and the toxicology of specific drugs and poisons will also be dealt with. Visits to the Four Courts and Coroner's Court may be arranged.

Medical Ethics **(FMED 5002)**
Hilary and Trinity Terms of Fifth Year

The subject of Medical Ethics is concerned with the ethical dimension inherent to the practice of Medicine. The course is presented in a series of lectures addressing the basic ethical concepts and issues which all medical students are expected to know and to understand. One section of the course deals with the overall nature of ethical medicine, including sources, principles, professional responsibilities and norms, and the traits of character required of the good medical practitioner dedicated 'to cure and to care' for the sick. The other section of the course deals with particular ethical issues arising in various medical specialties. The course is taught by clinicians expert in the various fields as well as by medical ethicists. Consideration is given to medico-ethical codes and guidelines, which have governed the practice of medicine since its ancient scientific origins. Knowledge of the subject is assessed by a written examination and by a written case-study project that each student has to submit.

Specific topics treated in the course are: The goals of medicine and the first principles of medical ethics. Ethical responsibility and understanding moral action and omission. Ethical features of the doctor-patient relationship. The patient's ethical right to refuse treatment. The medical concept of the human being at the beginning and at the end of life. Ethical criteria in evaluating medico-ethical situations. Also treated are central ethical issues arising in the fields of General Practice, Obstetrics and Gynaecology, Psychiatry, Palliative Medicine, Public Health, Medical Research, and Medical Genetics. Students are free to select any area of medical practice for consideration in their personal research case-study project.

Ophthalmology **(OPHT 5001)**
The aims of the course are:

(i) To familiarise the student with the diagnosis and treatment of those conditions which constitute the greater part of the affections of the eye met with in general practice, and investigations which can be carried out with the minimal employment of special equipment.

(ii) To instruct the student in the use of the ophthalmoscope.

(iii) To instruct the student in ocular signs and symptoms found in some systemic diseases and disorders.

(iv) To instruct the student in retinoscopy and in the correction of errors of refraction. Optics will be dealt with only in so far as an understanding of them is required for the examination of the eye and for the treatment of certain eye conditions.

Otolaryngology **(OTOL 5001)**
This systematic course of lectures is intended as an introduction to the study of the diseases of the ear, nose and throat, with special reference to the practical aspects of this subject. Its

aim is to help the student to diagnose and deal with the common diseases in this speciality that are met with in general practice; the rarer conditions are dealt with briefly.

Endoscopy is also included, as the student should be acquainted with the modern developments in bronchoscopy and oesophagoscopy, and should be cognisant of the indications for their use. The important points in clinical anatomy will be explained, as well as the physiology of the parts concerned. The fundamental facts of the major operations will be discussed and the minor surgical procedures will be described fully.

There is an oral clinical examination, at which the candidate must be able to use the head mirror and the electric auriscope.

Tropical Medicine
A course of lectures in Tropical Medicine is given in the Hilary term of the Final Medical Year.

General Practice (GPRS 5001)
An introductory lecture course is held in the Trinity term covering organisational and clinical aspects of Irish general practice.

During the clinical attachment in general practice, each student takes part in small group seminars and lectures and has an attachment to a GP tutor. Clinical teaching is undertaken during this attachment together with project work and presentations. Students are introduced to aspects of consultation skills involved in general practice using video techniques, simulations and small group discussion. A principal aim of the clinical course is to introduce students to problem-solving techniques as important elements of patient management.

Psychiatry* **(PSYC 5001)**
There are introductory seminars and lectures given in the teaching hospitals during the Second and Third Year of Medicine as part of the general introduction to clinical medicine in those hospitals.

In the Fifth/Sixth Year, there is a residency of eight weeks in clinical psychiatry; this is a full-time residency going on throughout the day with evening assignments and an opportunity to gain experience in overnight duty under supervision. The theoretical aspects of clinical psychiatry are also covered during this period. This theoretical course of instruction is amplified by the use of recorded tapes, video television, slides and other visual aids. However, these additions are considered no substitute for personal contact between teacher and student, or direct interaction between student and the patient.

Paediatrics* (PAED 5001)
Paediatrics is introduced from the first medical year, with formal teaching during the Trinity term of the 5th year and Michaelmas term of the sixth year. The course is an 8 week residency

* Residency bookings for these subjects are made through the Medical School Office, Earlsfort Terrace (telephone 01-7167454/7440).

in approved paediatric hospitals and consists of formal lectures but with an emphasis on clinical/bedside teaching. The course covers normal and abnormal physical and intellectual development and the main paediatric infections and disorders. Lectures in neonatology are given during the 8 week residency in paediatrics and neonatal clinical instruction is received during the obstetric clerkship.

Obstetrics and Gynaecology* **(OBGY 5001)**
Teaching in Obstetrics and Gynaecology commences with a two week attachment in Gynaecology during the nine month residency in the general hospital. It is then continued during the period 1 March to 1 December of the Fifth/Sixth Year. Students must complete eight weeks in residence in an approved maternity hospital before 1 November.

Sexually Transmitted Diseases
A course of instruction in Sexually Transmitted Diseases is organised in various years of the course.

Special Therapeutics (Fourth, Fifth and Sixth Years)
The course of lectures will consider individual diseases with particular reference to newer methods of treatment. Important points about the use of certain drugs, such as precautions in using them or common toxic reactions, will be dealt with in some detail. Physical methods of value in the treatment of disease will be considered.

The examination in Special Therapeutics will form part of the Final Examination in Medicine in the paper, clinics and orals.

Medicine (MEDN 6001) and Surgery (SURG 6001)
In the teaching of Medicine and Surgery, the integration of all the pre-clinical and para-clinical subjects in the analysis of the aetiology, pathology, diagnosis and treatment of disease is attempted (vertical integration).

Second and Third Year of Medicine students will attend the general hospitals once a week for three terms for clinical demonstrations in Medicine and Surgery related to the academic teaching. Fourth Year students will attend a clinical programme of instruction in Medicine and Surgery once a week in the Michaelmas term and part of the Hilary term.

Formal instruction in Medicine and Surgery begins on 1 March of the Fourth Year and continues for the nine month residency period. During this time, the students rotate through medical and surgical specialities.

Students return to the general hospital in the Hilary term of the Final Medical Year and are assigned to consultants for clinical training.

Textbooks Recommended for MB, BCh, BAO Courses

Every student is required to be provided with at least the ordinary textbooks of the following list in the subjects in which he/she is attending courses of study. Such books should be procured at the beginning of the course, and should be a recent edition.

Textbooks for Foundation Year

Mueller and Young — Emery's Elements of medical genetics, 11th edition

Textbooks for Systems 1 Curriculum

Anatomy

Slaby, McClune and Summers: *Gross Anatomy in the Practice of Medicine*

Moore: *Clinical Anatomy*

For reference :

Henry Gray : *Anatomy*

Grant: *Atlas of Anatomy*

Personal & Population Health

C Dowrick (ed): *Medicine in Society: Behavioural Sciences for Medical Students, Arnold; 2001*

For reference:

C Kelleher, J Solan, D McKeown *Lecture Notes on Public Health Medicine in Ireland, , 3rd edition, Department of Health Promotion, National University of Ireland, Galway; 2001*

L Daly, G Bourke *Interpretation & Uses of Medical Statistics, 5th edition, Blackwell; 2000*

Neuroanatomy

Crossman and Neary: *Neuroanatomy. An Illustrated Colour Text*

For reference:

Nolte: *The Human Brain*

Martin: *Neuroscience*

Embryology

Langman : *Medical Embryology*

MacLachlan: *Medical Embryology*

For reference :

Larsen : *Human Embryology*

Functional Histology
Junqueira, Carneiro & Kelly (Lange): *Basic Histology*
and
Fox (WCB Publications): *Human Physiology*

Practical Work Booklist
HG Burkett, B Young, JW Heata (Churchill Livingstone): *Wheater's Functional Histology*

Textbooks for Systems 2 Curriculum

Pharmacology
Rang HP, Dale MM, Ritter JM: *Pharmacology* (4th edition)
Katzung BG: *Basic & Clinical Pharmacology* (7th edition)

Fourth, Fifth and Final Years

Therapeutics
Alstead, Girdwood and MacGregor: *Textbook of Medical Treatment.*
Laurence, D.R: *Clinical Pharmacology*. *The Manual of Therapeutics* (Washington University).

For Reference:
Goodman and Gilman: *The Pharmacological Basis of Therapeutics.*
Martindale: *Extra Pharmacopoeia.* (Vol. I).
Modell: *Drugs of Choice.*
Packman: *Manual of Medical Therapeutics.*
Drugs and Therapeutic Bulletin.
Adverse Reactions Bulletin.

Public Health Medicine and Epidemiology

Required Reading:
R Beaglehole, R Bonita, T Kjellstrom: *Basic Epidemiology (Published by World Health Organisation, Geneva 1993)*
C Kelleher, J Solan, D McKeown: *Lecture Notes on Public Health Medicine in Ireland (3rd edition, Department of Health Promotion, National University of Ireland, Galway 2001)*

Additional Reading:
L Daly, G Bourke: *Interpretation & Uses of Medical Statistics (5th Edition, Blackwell 2000)*

Legal Medicine

Textbooks Recommended:

Gee and Watson: *Lecture Notes on Forensic Medicine* (5th ed., 1989).

Knight: *Legal Aspects of Medical Practice* (5th ed., 1992).

The Medical Council: *A Guide to Ethical Conduct and Behaviour* (November, 1998).

Simpson and Knight: *Forensic Medicine* (10th ed., 1991).

For Reference:

Cusack: (ed): *Medico-Legal Journal of Ireland*

Brazier: *Medicine, Patients and the Law* (2nd ed., 1992).

Gresham: *A Colour Atlas of Forensic Pathology* (1975).

Kennedy and Grubb: *Medical Law: Text and Materials* (2nd ed., 1994).

Mason and McCall Smith: *Law and Medical Ethics* (3rd ed., 1991).

Polson, Green and Lee: *Clinical Toxicology* (3rd ed., 1983).

Annual Reports and Relevant Literature of the Medical Defence Union and Medical Protection Society.

Relevant European Union Law.

Relevant Statutes of the Oireachtas and Ministerial Regulations.

Medical Ethics

Basic Guiding Texts

A Guide to Ethical Conduct, The Medical Council of Ireland, l998 (5th Edition).

Medical Ethics: Course Source Pack (provided yearly by course director). Contains an outline of the main topics of the course; includes longer essays on the course themes and a longer bibliography. Available from the Departmental Office.

Four Basic Textbooks

Principles of Biomedical Ethics, by T L Beauchamp and J F Childress, OUP, 1994. Comprehensive. A classic in the field. A large substantial text. Approaches the subject from theoretical principles and their application to medical cases.

Pathways in Medical Ethics, by Alan G Johnson, Hodder & Stoughton, London, 1990. Basic and accessible textbook containing the elements of a first course. The author is professor of surgery at the University of Sheffield where he teaches medical ethics.

Ethical Dimensions in the Health Professions, by Ruth Purtillo, Saunders, Philadelphia, 1999. Basic and accessible text-book. Very good survey of ethical perspectives. It is helpful particularly in approaching concrete ethical problems and the making of decisions. Abundant number of cases.

Life and Death in Healthcare Ethics: A short introduction, by Helen Watt, Rouledge, London 2000. An introductory textbook A clear and very accessible book in size and content. Ideal as an introductory text for students in medical ethics.

Reference Texts

Life, Liberty and the Defence of Dignity: The Challenge of Bioethics (San Francisco, 2002) and *Towards a More Natural Science* (Chicago 1985) both texts by Leon R Kass MD, Free Press, Macmillan, Chicago, 1985. Excellent collections of essays on medical ethics written by a scientist and medical doctor as well as a philosopher, also author of Human Cloning (1998).

Law, Ethics and Medicine, Peter Skegg, Clarendon, Oxford, 1984. Basic in the field. A primary for the treatment of the relationship between medical ethics and law.

General Practice

Stephenson A: *A textbook of General Practice*

Fraser R: Clinical Method – *A General Practice Approach*

McWhinney I: *A textbook of Family Medicine*

Sackett D et al. *Evidence Based medicine: How to Practice and Teach EBM*

Greenhalgh T L: *How to read a paper*

Skrabanek O and McCormick J: *Follies and Fallacies in Medicine*

Doyle D: *Domiciliary Palliative Care – a Guide for the Primary Care Team*

Grainger C: *Stress Survival Guide*

Consultation Skills

Pendleton D et al: *The Consultation – an Approach to Learning and Teaching*

Tate P: *The Doctor's Communication Handbook.*

Psychiatry

Puri, Laking, Treasadon: *Textbook of Psychiatry*

Barraclough Gill Clear: Hughes' *Outline of Modern Psychiatry*

Rees, Lipsedge, Ball: *Textbook of Psychiatry*

Katona, Robertson: *Psychiatry at a Glance*

Elkin: *Introduction to Clinical Psychiatry*

Graham: *Child Psychiatry – a Developmental Approach*

Standard Reference Books: (Available in University and Hospital Libraries)

Gelder, Gath, Mayou and Cowen (3rd Edition): *The Oxford Textbook of Psychiatry*

Kaplan, Sadock: *Concise Textbook of Clinical Psychiatry*

Kendell, Zealey: *A Companion to Psychiatric Studies*

Ophthalmology

Neame, H. and F.O. Williamson-Noble: *A Handbook of Ophthalmology* (Churchill).

Otolaryngology

Bull, PD (Blackwell Science)*: Lecture notes on Diseases of the Nose, Throat and Ear.*

Dhillon RS and East, CA: *An Illustrated Colour Text Ear, Nose and Throat and Head and Neck Surgery*
Colman BH, *Diseases of the Nose, Throat and Ear and Head and Neck,* Churchill and Livingstone

Obstetrics and Gynaecology

Beischer and Mackay:	*Obstetrics and the Newborn.*
Mackay, Beischer, Cox and Wood:	*Illustrated Textbook of Gynaecology.*
O'Driscoll and Meagher:	*Active Management of Labour.*
Jenkins:	*Listening to Gynaecological Patients' Problems.*
Symonds:	*Essentials of Obstetrics and Gynaecology.*
Chamberlin:	*ABC of Antenatal Care*
Impey:	Obstetrics and Gynaecology

Paediatrics

Lissauer and Clayden:	*Illustrated Textbook of Paediatrics*
Waterston, Helms and Ward-Platt:	*Paediatrics – Understanding Child Health*
Hull and Johnston:	*Essential Paediatrics*
Olver et al:	*Core Paediatrics and Child Health*

Other Texts:

Gill and O'Brien:	*Paediatric Clinical Examination*
Loftus:	*Pathways in Paediatrics*
Oski:	*Principles and Practices of Paediatrics*
Behrman, Kliegman and Arvin:	*Nelson Textbook of Paediatrics*
Forfar and Arneil:	*Textbook of Paediatrics*

General Interest Medicine

Harrison's *Principles of Internal Medicine*, 15th edition
Oxford *Textbook of Medicine*
Kumar and Clarke (eds) *Clinical Medicine*
Talley and O'Connor (Eds): *A Guide to Clinical Examination*
Baliga (ed): *MCQs in Clinical Medicine*

Cardiology

E Braunwald (ed): *Heart Disease*, 5th edition
JR Hampton (ed): *ECGs Made Easy*

Rheumatology

Klippel JH: *Rheumatology*
Kelley et al (eds): *Textbook of Rheumatology*

Infectious Diseases
G Mandell (ed): *Principles and Practice of Infectious Diseases*

Endocrinology
De Grost (ed): *Endocrinology*
Nephrology
Brenner BM (ed): *The Kidney*, 5th edition
Brady HR and Wilcox CS (eds): *Therapy in Nephrology and Hypertension*

Haematology
Textbook of Haematology

Neurology
Adams and Victor (eds): *Principles of Neurology*, 6th edition

Gastroenterology
Sleisenger and Fordtran (eds): *Gastrointestinal Disease*

Inherited Diseases/Genetics
Scriver et al (eds): *The Metabolism and Molecular Basis of Inherited Disease*

Oncology
Holland et al: *Cancer Medicine*
De Vita Jnr et al (eds): Cancer: *Principles and Practice of Oncology*

Surgery
Textbook of Surgery: The Biological Basis of Modern Surgical Practice *By: Courtney M. Townsend, Beauchamp R. Daniel, B. Mark Evers, Kenneth L. Mattox. 16th ed. WB Saunders, 31st October, 2000 Published in USA*

Bailey and Love's Short Practice of Surgery *y: R.C.G. Russell, N.S. Williams, C.J.K. Bulstrode. 23rd ed. Arnold, 25 Apr, 2000. Published in UK*

Hamilton Bailey's Demonstration of Physical Signs in Clinical Surgery *By: J.S.P. Lumley. 18th ed. Aranold, 8 May, 2000. Published in UK*

An Introduction to the Symptoms and Signs of Surgical Disease *By: Norman Browse. 3rd ed. Arnold, 1997. Published in UK*

Principles and Practice of Surgery *By: A.P.M. Forrest, D.C. Carter, I.B. Macleod. 3rd ed. Churchill Livingstone, 1995 Published in UK*

Essential Surgical Practice: Basic Surgical Training: Vol 1 *By: A. Cuschiere, R.J. Steele, A.R. Moossa. 5th ed, Arnold, 30th March, 2001. Published in the UK*

Current Surgical Diagnosis and Treatment By: Lawrence W. Way. 11th ed. Appleton and

Lange, Oct, 2002. Published in the UK

Degree of Bachelor of Science (BSc) in Medical Subjects

1. The Degree of BSc with Honours in medical subjects may be conferred in any one of the following subjects:
   (a) Anatomy;
   (b) Biochemistry;
   (c) Medical Microbiology;
   (d) Pathology;
   (e) Pharmacology;
   (f) Physiology.
   At the discretion of the Professors concerned, special instruction in related subjects may be arranged.
2. Students who have passed the appropriate University examination in Medicine in the corresponding subjects at a standard of at least Second Class Honours are eligible to take the BSc Degree in that subject.
3. To be eligible to pursue the Degree of BSc in Biochemistry, students must have passed the First Medical Examination with Honours and must also have passed the Second Medical Examination.
4. Candidates who hold the Degrees of MB, BCh and BAO may be recommended by the Faculty of Science for admittance to the Honours Degree courses in any one of the subjects *(a)* to *(f)*.
5. For admission to the Honours Degree Examination in subjects *(a)* to *(f)*, candidates must have attended the prescribed courses for at least three terms.

The following are the prescribed courses:

Anatomy and Physical Anthropology

To be eligible to pursue the Degree of BSc in Anatomy, students must have passed the Foundation year of Medicine, First year of Medicine and Second Year of Medicine to include systems 1 and systems 11 courses. Students must attain an overall Second Class Honours in Systems 1.

The course extends over one academic year and consists of lectures and practicals in Advanced Anatomy, including Morphology, Embryology and Physical Anthropology. Students are also required to pursue a research project during the year.

Biochemistry
Courses extend over one year and consist of lectures, seminars and practical work in Biochemistry devoted to more advanced aspects of the subject. Students are also required to pursue a research topic.

Medical Microbiology
Courses extend over one year and are directed to more advanced aspects of the subject.

Pathology
Courses extend over one year and are directed to more advanced aspects of the subject.

Pharmacology
Courses extend over one year and are directed to more advanced aspects of the subject. Courses consist of lectures/tutorials, research seminars, discussion sessions on articles from the literature and practical work.

Students are also required to pursue a research project and present a thesis on this work as part of the examination.

Physiology
Courses extend over one year and consist of lectures and/or assigned reading, seminars and practical work in physiology devoted to more advanced aspects of the subject.

Students are also required to pursue a research project.

Degree of Bachelor of Medical Science (BMedSc)

The Bachelor of Medical Science may be awarded to students who have passed the relevant University examinations, having satisfactorily attended courses in the first four years of the medical course. Where, because of qualifications, degrees or other proven academic achievement on entry to the medical course, a student is granted exemption from subjects of this course, the BMedSc may be awarded on satisfactory completion of the non-exempted subjects and on passing the relevant University examinations in these subjects.

To be eligible for the award of the degree, candidates must present a thesis of between 8,000 and 10,000 words, excluding references, on an assigned topic agreed with the relevant department of one of the following subjects: Anatomy, Biochemistry, Medical Microbiology, Pathology, Pharmacology, Physiology, Public Health Medicine and Epidemiology or applied clinical aspects of these subjects. The degree may be awarded with honours.

The degree will be available ordinarily to students completing the Fourth Year of Medicine in the current academic year and to those who meet the above requirements but have left the Medical School without attaining the degrees of MB BCh BAO. The degree may also be made available to others who meet the above requirements, subject to Faculty of Medicine approval.

Postgraduate Degrees

Postgraduate Degrees

Degree of Master of Science
General Practice
Sports and Exercise Medicine
Sports Physiotherapy
Psychotherapy

Degree of Master of Obstetrics

Degree of Master of Public Health

Degree of Master of Surgery

Degree of Doctor of Medicine

Degree of Doctor of Philosophy

Diplomas

Higher Diploma in Child Health

Higher Diploma in Gynaecology and Obstetrics

Higher Diploma in Healthcare (Informatics)

Higher Diploma in Healthcare (Risk Management)

Higher Diploma in Medicine

Higher Diploma in Medicine (Dermatology)

Higher Diploma in Occupational Health

Higher Diploma in Community Ophthalmology

Diploma in Emergency Medical Technology

Certificates

Certificate in Healthcare Informatics

Degree of Master of Science (MSc)

A candidate who has obtained the Degrees of MB BCh BAO, BSc (Physiotherapy), BSc (Radiography) or BSc (Nursing) from the National University of Ireland, or other primary degree or other qualification deemed equivalent by the Faculty of Medicine, and who wishes to obtain further postgraduate training in their chosen branch of Medicine or allied subjects related to Medicine, with particular reference to the academic and research aspects, shall be eligible to enter for the Degree of MSc. The Degree may be obtained by thesis (Mode I) or by examination (Mode II).

MSc Degree by Thesis (Mode I)
Candidates must attend for at least three terms and carry out research under the direction of the professor (or university lecturer) in the subject concerned. The thesis presented by the candidate is to embody the results of this research. The Faculty may approve of the work being carried out elsewhere under the direction of the professor (or university lecturer) in the subject concerned.

Candidates may be required to pass an oral examination in the subject matter of the thesis if the examiners so decide. Three copies of the thesis must be lodged with the Supervisor of Examinations, University College Dublin, on or before the date fixed by the university.

MSc Degree by Examination and Thesis (Mode 11)
The course is full-time covering twelve months. The course can also be taken on a part-time basis over at least two years. It will be divided into Section A and Section B. Section A will be aimed at that aspect of Medicine, or allied subjects related to Medicine, and will be directed by the relevant department. The student will follow the teaching programme made available, including lecture demonstrations in research techniques and will take part in the teaching of undergraduate students. The Anatomy examinations for Section A are held in May. Section B will consist of a research project and thesis. The thesis must be presented before November of the year in which the examinations are taken.

Degree of Master of Science (MSc) (General Practice)

MDMXP001

This is a two-year part time course leading to the MSc (General Practice) degree and is designed to cater for the educational needs of general practitioners. The course provides the theoretical framework in critical appraisal, communication skills, ethics and changing or new areas of clinical practice and also the opportunity for general practitioners to be involved in research and audit.

Entry Requirements
Applicants must be registered medical practitioners and either a) have spent at least four years in full-time General Practice, (or its part-time equivalent); or b) have completed vocational training for General Practice and hold the MICGP or equivalent qualification.

Course Description

Year 1

- Academic Basis of General Practice
- Teaching and learning in General Practice
- Research in General Practice
- Prevention

Year 2

Four units to be selected from the following :

- Immediate Care
- Rational Prescribing
- Palliative Care
- Ophthalmology
- Minor Surgery

Examination
There is a written examination in the summer of First Year, and in Winter of Second Year. Continuous assessment takes place throughout the course. Each candidate must prepare a thesis which must be submitted by the summer of Second Year.

Further particulars may be obtained from the Department of General Practice, Coombe Healthcare Centre, Dolphin's Barn Street, Dublin 8. (Telephone: 01-4730895, Fax 4732791).

Degree of Master of Science (Sports and Exercise Medicine) (MSc)

MDMXP002

This is a part-time modular postgraduate course held over two years. The course is suitable both for general practitioners and for doctors with an interest in Sports Medicine as a full-time career.

Entry Requirements
Applicants must be registered medical practitioners. Non-EU applicants must demonstrate proficiency in English.

Aim
The aim of the course is to provide detailed training in the various disciplines related to Sports Medicine.

Course
The course will be delivered on a part-time, modular basis over two years. There will be four 75 hour modules (i.e. 300 hours), each running over fifteen weeks and will involve one half-day (four hours) per week and occasional Saturday sessions. Candidates will have the option of completing the course over two, three or four years.

Module 1 *(SMED P011)*
Sports Biomechanics , Exercise Physiology and Research Methods.

Module 2 *(SMED P012)*
Sports Psychology and Medical Problems Related to Exercise Participation

Module 3 *(SMED P013)*
Musculoskeletal Injuries 1 (Upper Limb and Groin), Sports Radiology I

Module 4 *(SMED P014)*
Musculoskeletal Injuries 2 (Head, Spine, Sacro-Iliac Joint and Lower Limb)
Sports Radiology 2

Module 1 – *(SMED P011)*
Fundamentals of biomechanics; kinetics; kinematics; biomechanics of bone and soft tissues; biomechanical models of sports performance.

Cardiorespiratory and muscle physiology; responses to exercise and training; adaptation to environmental stresses (temperature/pressure/travel); fatigue; considerations for specific groups (young/old/female/pregnancy).

Fundamentals of statistics; design of experiments/surveys; data analysis; critical appraisal of literature.

Module 2 – *(SMED P012)*
Psychological determinants of sports performance; psychological strategies to improve performance; the injured athlete; exercise addiction.

Exercise and disease (cardiovascular/respiratory/metabolic); exercise prescription; substance abuse in athletes; principles of immediate care.

Module 3 – *(SMED P013)*
Principles of assessment and management of musculoskeletal injuries; adverse neural tension; muscle balance theory and practice; upper limb and groin injuries; functional anatomy.

Introduction to radiology; imaging techniques; regional imaging of upper limb and groin injuries.

Module 4 – *(SMED P014)*
Head, spine, sacro-iliac joint and lower limb injuries; functional anatomy; physiotherapy techniques; manipulative therapy techniques; strapping and taping; injection techniques.

Regional imaging of head, spine , sacro-iliac and lower limb injuries.

Dissertation *(SMED P015)*
A project involving original research to be completed over the years of the course.

Examination
Each module will be independently examined; there will be two examinations per year. To qualify for the degree, candidates must pass all modules. The examination will consist of a written examination, an MCQ, a practical/oral/clinical session and a dissertation.

Degree of Master of Science (Sports Physiotherapy) (MSc)

MDMXP0007

This is a part-time modular postgraduate course held over two years. The course is suitable both for those practising general physiotherapy and for those with an interest in Sports Physiotherapy as a full-time career.

Applicants must hold the Degree of BSc (Physiotherapy) (NUI) or other primary degree or other qualification deemed equivalent by the Faculty of Medicine, with two years' post qualification experience.

The aim of the course is to provide detailed training in the various disciplines related to Sports Physiotherapy.

There will be four 75 hour modules (i.e. 300 hours). Each module will run over 15 weeks and will involve one half-day (4 hours) per week and occasional Saturday sessions. Each candidate will be expected to attach themselves to a sporting entity of their choice and as part of their dissertation to present a log of their involvement (in an appendix) with relevant case studies and statistical analysis in the body of the work to support their dissertation topic.

Topics covered:
Exercise Physiology, Functional Human Anatomy, Human Biomechanics, Sports Nutrition, Sports Psychology, Informatics, Research Methodolgy & Statistics, Clinical Examination, Screening, Manual & Exercise Physiotherapy,

Examinations:
Examination by in-course assessment during the first and second year by written and practical/oral exams in the first and second year (Summer). The MSc requires completion of a minor dissertation.

The course will be administered by the UCD School of Physiotherapy

Degree of Master of Obstetrics (MAO)

MDMRP0005

A candidate who has obtained the Degrees of MB BCh BAO from the National University of Ireland or Licentiates of the Royal College of Surgeons in Ireland shall be eligible to obtain the Degree of MAO. Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree of Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such Degree of Master of Obstetrics may be obtained, shall be eligible to obtain the Degree of MAO, provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of the Department or of a Professor of the University.

Regulations

1. The candidate shall apply to the Faculty for permission to present for the Degree of Master of Obstetrics by thesis at least twelve months before presentation of the thesis for examination.

2. The application, which should be in triplicate, should be accompanied by:

   - A detailed outline of the proposed area of research and its aims;
   - Details of experience in the subject chosen;
   - Information on the facilities available for carrying out the research and the methods to be used;
   - A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work and to confirm that the research has been approved by the appropriate body.

3. A period of not less than three years shall have elapsed from the time the candidate obtained the Degrees of MB BCh BAO or Licentiate of the Royal College of Surgeons in Ireland, not less than four years of which shall have been spent in the practice of obstetrics and gynaecology at a level approved by the Faculty.

4. The candidate must have passed a preliminary clinical examination in obstetrics and gynaecology; exemption from this examination may be granted if the Faculty considers that the candidate holds a suitable obstetrical and gynaecological qualification acquired by examination.

5. The candidate must present a thesis, the work for which has been carried out over a period of not less than one year in the Department of Obstetrics and Gynaecology in the University under the direction of the Professors of Obstetrics and Gynaecology. The Faculty may approve of the work being carried out elsewhere.

6. Candidates must register with the University and pay the appropriate fee for the academic terms during which the research is undertaken.

The following further conditions for the award of the degree must be fulfilled:

(a) The thesis shall embody original observations on the subject chosen and shall contain material which in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.

(b) Candidates must produce evidence of having been substantially involved in carrying out research work over a period of one year before lodging the thesis for examination.

(c) If the work is conducted elsewhere than in the Department of Obstetrics and Gynaecology in the University, the candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort, when the thesis is being lodged for examination.

(d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.

(e) Candidates shall advise the Faculty of Medicine of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.

(f) A thesis may not be lodged for examination until a period of at least twelve months has elapsed from the date of Faculty approval and registration with the University.

(g) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.

(h) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure
Application forms are available from the Faculty of Medicine Office, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167454/7440). Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Master of Public Health (MPH)

MDMXF0012:
MDMXP0013:

Entry Requirements:
The Degree of Master of Public Health may be granted to medical and dental practitioners and to those with professional backgrounds in health or health care provision, who hold an appropriate primary degree or equivalent qualification. Candidates may be required to undertake an interview prior to acceptance for the course. Candidates must complete the approved course of study and pass the prescribed examination. A period of not less than two years must normally elapse from the date of obtaining primary qualification and admission to the course for the Degree of Master of Public Health. Overseas students applying to undertake this course must provide proof of proficiency in English.

Course Description:
The full-time course for the Master of Public Health Degree extends over one academic year of study; alternatively a part-time course may be offered extending over two academic years. The course will not be held unless there is a minimum of ten suitable applicants.

Course Content:
The course includes the study of the following subjects:

(a) The quantitative sciences appropriate to the study of population health, including medical statistics, epidemiology and medical computing.

(b) The behavioural sciences as applied to population health; the scientific study of human behaviour, including the health education of the public and the psychological and social factors in community organisation and in health services utilisation.

(c) Genetic and environmental (including microbiological) factors in health and disease; methods of prevention and control as applied to physical disease.

(d) Health services organisation, including the ascertainment of the health needs of the population; the provision, deployment and evaluation of health services; the economics, staffing and utilisation of health services and the principles of administration and management.

Thesis:
Each candidate must present a thesis on a subject allocated by the Department of Public Health Medicine and Epidemiology, which shall embody a detailed critical review of the literature and/or original work on the topic. The thesis should be of publishable standard and must conform to Departmental requirements.

Examination:
For candidates taking the full-time course, the examination for the Degree of Master of Public Health is held in the Summer only. It will include written and oral sections in the subjects of the curriculum. A candidate will not be admitted to the examination until he/she has completed the course of instruction to the satisfaction of the University. For candidates taking the two-year, part-time course, an examination will be held at the end of each year in the relevant subjects.

Further particulars may be obtained from the Department of Public Health Medicine and Epidemiology, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: +353 1 7167345; fax: +353 1 7167407; email: public.health@ucd.ie).

Degree of Master of Surgery (MCh)

MDMRF0003:
MDMRP0006:
A candidate who has obtained the Degrees of MB BCh BAO from the National University of Ireland or Licentiates of the Royal College of Surgeons in Ireland shall be eligible to obtain the Degree of Master of Surgery (MCh). Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree of Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such a degree of Master of Surgery may be obtained, shall be eligible to obtain the degree MCh provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of Department or of a Professor of the University. A period of not less than three years shall have elapsed from the time the candidate obtained the Degrees of MB BCh BAO or Licentiate of the Royal College of Surgeons in Ireland.

Regulations
1. The candidate shall apply to the Faculty for permission to present for the Degree of Master of Surgery (MCh) by thesis at least twelve months before presenting the thesis for examination.

2. The application, which should be in triplicate, should be accompanied by:
   - A detailed outline of the proposed area of research and its aims;
   - Details of experience in the subject chosen;
   - Information on the facilities available for carrying out the research and the methods to be used;
   - A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work and to confirm that the research has been approved by the appropriate body.

- Candidates may not submit proposals based on research previously used to gain membership of a Faculty.

3. The candidate must present a thesis for research work carried out in the Department of Surgery in the University under the direction of the Professors of Surgery. The minimum time required in the conduct of the research should be equivalent to at least one year's full-time research. The Faculty may approve of the work being carried out elsewhere.

4. Candidates are required to be registered with the University and pay the appropriate fee.

The following further conditions for the award of the degree must be fulfilled:

(a) The thesis shall embody original observations on the subject chosen and shall contain material which in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.

(b) Candidates must produce evidence of having been involved in carrying out research work over a period equivalent to one year's full-time research before lodging the thesis for examination.

(c) If the work is conducted elsewhere than in the Department of Surgery in the University, the candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort when the thesis is being lodged for examination.

(d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.

(e) Candidates shall advise the Faculty of Medicine of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.

(f) A thesis may not be lodged for examination until a period of at least twelve months has elapsed from the date of Faculty approval and registration with the University.

(g) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.

(h) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure
Application forms are available from the Faculty of Medicine Office, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167454/7440).

Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Doctor of Medicine (MD)

MDDRF0001

I

Subject to the provisions of the University Statute, a candidate shall be eligible to obtain the Degree of Doctor of Medicine fifteen terms after obtaining the Degree of Bachelor of Medicine.

A candidate shall be eligible to obtain the Degree of Doctor of Medicine

(a) by thesis; or

(b) by presenting published work embodying the results of personal observations or original research which, in the judgement of the examiners, is considered worthy of recognition by such degree.

(c) A period of not less than 3 years shall have elapsed from the time the candidate obtained the Degrees of MB MCh BAO.

The University may grant the Degree of Doctor of Medicine to graduates of the University or Licentiates of the Royal College of Surgeons in Ireland who shall have fulfilled all prescribed conditions as to the manner in which such Degree of Doctor may be obtained. Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree in Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such Degree of Doctor may be obtained, shall be eligible to obtain the Degree of Doctor of Medicine provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of the Department or of a Statutory Professor of the University. The Faculty, if satisfied that a *prima facie* case has been made, may appoint one or more of its members to advise on the work and preparation of the thesis.

II

Regulations

1. The candidate shall apply to the Faculty for permission to present for the Degree of Doctor of Medicine by thesis at least two years before presentation of the thesis for examination.

2. The application, which should be in triplicate, should be accompanied by:

   - A detailed outline of the proposed area of research and its aims;
   - Details of experience in the subject chosen;
   - Information on the facilities available for carrying out the research and the methods to be used;

- A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work, detailing the percentage of protected research time devoted to the project on an annual basis, and confirming that the research has been approved by the appropriate body.
- Candidates may not submit proposals based on research previously used to gain membership of a Faculty.

The following further conditions for the award of the degree must be fulfilled:

(a) The thesis shall embody original observations on the subject chosen and shall contain material which in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.

(b) Candidates must produce evidence of having been substantially involved in carrying out research work over a period of two years before lodging the thesis for examination.

(c) The candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort when the thesis is being lodged for examination.

(d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.

(e) Candidates must register with the University for a minimum period of two years and pay the appropriate fee for the academic terms during which the research is undertaken.

(f) Candidates shall advise the Faculty of Medicine of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.

(g) A thesis may not be lodged for examination until a period of at least two years has elapsed from the date of Faculty approval and registration with the University.

(h) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.

(i) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure
Application forms are available from the Faculty of Medicine Office, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167454/7440).

Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Doctor of Philosophy (PhD)

Candidates for this degree are required to be admitted by the Faculty on the recommendation of the Professor; their admission must then be confirmed by the Academic Council. Candidates who have not graduated in this University may be admitted if suitably qualified.

No candidate can be allowed to enter on a course of study and research for the Degree of PhD unless he/she has reached a high honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Professor and the Faculty of his/her fitness.

The candidates shall pursue research for a period of nine terms but the Academic Council may accept a period of six terms in the case of a graduate whose attainments justify such shorter course.

The thesis must normally be prepared under the supervision of the Professor, but the Faculty may, on the recommendation of the Professor, assign another member of the staff to supervise the candidate's research, under the Professor's general direction. The thesis must be prepared in the University, unless permission is given to the candidate to work elsewhere under the Professor's general direction. Such permission will only be given to candidates who have attended courses in the University for twelve terms before admission to the course for the PhD.

Candidates may enter for examination in January of the year in which their work is to be examined; the time of examination to be arranged as may be convenient to the candidates and the examiners. If the thesis is not presented before the 1st February following, the candidate must re-enter.

Candidates will be required to take an oral examination on the subject matter of their thesis.

This degree will not be awarded unless the examiners report that the work is worthy of publication, as a whole or in part.

Candidates for the PhD Degree will be allowed six years from the date of registration in which to complete their degree. If they have not done so within that period, they must re-apply for registration.

Diplomas

Higher Diploma in Child Health (HDipCH)

MDHDP0007

Entry Regulations for EU Medical Graduates
Candidates must have passed their Final Medical Examination not less than eighteen months before the examination for the Diploma. in addition to any experience gained during the intern year prior to full registration, candidates must produce evidence of:

Either
having been a resident medical officer in a recognised children's hospital or in a recognised children's department of a general hospital for six months. Residence as a postgraduate student for one month in a recognised obstetric hospital will be accepted as equivalent to residence for one of the six months above;
Or
having had a clinical attachment in a recognised children's hospital or in a recognised children's department of a general hospital with certified attendance of at least nine hours weekly for twelve months.

Entry Regulations for Non-EU Medical Graduates
The Diploma is open to medical graduates of overseas Colleges who are recommended by the Health Department of the country of origin, or by the head of their hospital or university department, or, in the case of those already accepted in Great Britain, by the head of the paediatric department of the hospital to which they were attached.

Candidates must have passed their Final Medical Examination not less than two years before the examination for the Diploma. in addition to any experience gained during the intern year prior to full registration, candidates must produce evidence of:

Either
having been a resident medical officer in a recognised children's hospital or in a recognised children's department of a general hospital for twelve months. Residence as a postgraduate student for two months in a recognised obstetric hospital will be accepted as equivalent to residence for two of the twelve months above;
Or
having had a clinical attachment in a recognised children's hospital or in a recognised children's department of a general hospital with certified attendance of at least nine hours weekly for two years.

Candidates are also required to pass an English proficiency test.

Course Structure
Compulsory attendance at an evening course of lectures in the University and its affiliated hospitals is required of all candidates. Candidates are expected to have adequate clinical instruction during their paediatric residency. The course lasts for one week and is held in May each year. However, for candidates who require additional clinical exposure, an optional two-week course will be provided, including up to ten hours of bedside tutorials, clinical demonstrations and/or clinical attachments. Lectures will be given on all aspects paediatrics, including child welfare, school medical service, neonatal diseases, infectious diseases, child psychiatry, social paediatrics and dietetics. The course will not be held unless there is a minimum number of suitable applicants.

Examinations
The examination for the Higher Diploma in Child Health will consist of the following:

(1) One written examination in Paediatric Medicine and Surgery, including neo-natal disorders, Child Psychiatry, Social Paediatrics and the normal child.

(2) A clinical and oral examination.

The examination is held in the first fortnight of June.

Application Procedure
Application forms may be obtained from the Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167454/7440).

Higher Diploma in Gynaecology and Obstetrics (HDipGO)

MDHDP0001

Entry Regulations for EU Medical Graduates
Candidates must have obtained their primary medical degree not less than two years before the examination for the Higher Diploma in Gynaecology and Obstetrics. in addition to any experience gained during the internship year, prior to full registration, candidates must produce evidence of:

Either
having been a resident as a full-time medical officer in a recognised obstetric and gynaecological unit for a continuous period of six months;
Or
having acted as a clinical or sessional assistant in a recognised hospital unit or clinic in the field of reproductive medicine for at least nine hours weekly for two years.

Entry Regulations for Medical Graduates of Overseas Colleges
A candidate must have obtained their primary medical degree not less than two years before the examination for the Higher Diploma in Gynaecology and Obstetrics. in addition to any

experience gained during the intern year prior to full registration, candidates must produce evidence of:

Either
having acted as a full-time resident Medical Officer in a recognised obstetric or gynaecological unit for a period of twelve months;
Or
having acted as a clinical or sessional assistant in a recognised hospital unit or clinic in the field of reproductive medicine for at least nine hours weekly for two years.

Candidates are required to produce evidence of having passed a proficiency test in English.

Course Structure
Compulsory attendance at the course of lectures and demonstrations held on two evenings each week in University College Dublin and its affiliated hospitals is a requirement of all candidates. Clinical instruction is not provided for in the course and candidates are expected to have adequate clinical experience in the field of gynaecology and obstetrics. The course extends over a twenty-week period from October to March each year. Lectures will be given on all aspects of reproduction medicine, including applied reproductive anatomy and physiology, normal and abnormal obstetrics, psychological influences on reproduction, perinatal and maternal vital statistics, benign and malignant gynaecological disorders from childhood to senescence, fertility control and women's health screening together with aspects of research methodology, epidemiology and statistics.

Examinations
The examination for the Higher Diploma in Gynaecology and Obstetrics will consist of the following:

(1) A written examination on aspects of the course, including a multiple-choice questionnaire.

(2) A clinical and oral examination.

(3) A dissertation of approximately 5,000 words on a selected aspect of reproductive medicine.

Application Procedure
Application forms may be obtained from the University Department, National Maternity Hospital, Holles Street, Dublin 2 (telephone: 353-1-6373216)

Higher Diploma in Healthcare (Informatics)

MDHDP0010

This is a part-time, distance education postgraduate course utilising the World Wide Web. The course is designed to develop Informatics Skills in Medicine, Nursing, Radiology, Pathology, Health Management and other related areas. The Faculty of Medicine and the Institute for Healthcare Informatics in the Mater Hospital are partners in the development of this Diploma with the University of Derby and the Derbyshire Royal Infirmary in establishing Virtual Study Centres by utilising the World Wide Web. A modular course has been developed with modules being offered and validated by different institutions.

Entry Requirements
Applicants will normally hold a primary degree or post-professional qualification in either Computer Science or in a profession allied to medicine, together with relevant experience of Healthcare or Informatics or both. Students will also be considered with an appropriate qualification together with two years' experience, or with five years' experience in an appropriate area. Students will also be required to produce a 1,000 word essay which will be used to profile their writing style for quality assurance purposes.

Course
The student must study a number of core modules as well as whichever optional modules he/she wishes, depending on individual research interests.

Course Summary
Healthcare Informatics covering research methods, understanding the need for information in the healthcare environment, information management in healthcare, healthcare information systems evaluation, design and implementation, and understanding the impact of change and of Information Systems on both individuals and organisations.

Module 1: Research Methods
Research implementation, study design and data handling. Basic principles of statistical testing and interpretation of results. Statistical hypothesis testing, literature searching, clinical trial design, ethical issues and structuring a protocol. Questionnaires, structured interviews and observation forms. Qualitative vs quantitative research methods and the option of problem-based selection. Types of data and elementary descriptive statistics including measures of central tendency: mean, median, mode and percentiles.

Sampling distributions; estimation and hypothesis testing; non-parametric and parametric statistical tests.

Module 2: Management of Change
The process of change: characteristics of the change process, the effects of change on organisations, sub-organisations, groups and individuals. Organisational activity types and their effect on change. The effect of organisational culture on change. Strategies for change:

responses of individuals and organisations to the change process. Models of change and responses to the change process. The relevance of power, leadership, commitment and resistance to change. Procedures for the change process: decision making and the effect of participative decision-making.

Planning strategic change. Outside agencies. Techniques for implementing change: assuming effective change. Mechanisms and tools for facilitating effective change. Team building. The influence of communication.

Module 3: Information as a Corporate Resource

Corporate uses of healthcare information in a healthcare institution. This will cover such topics as audit, patient-focused care and clinical effectiveness.

Module 4: Introduction to Medical Systems or Introduction to Programming in M together with Implementing Healthcare Information Systems

Creating and implementing an information strategy; requirements/needs analysis; systems analysis and design; system development methodologies.

Examination

The examination will be partly by continuous assessment and partly by a final examination in each module on the World Wide Web.

Application Procedure

Further information is available from The Institute for Healthcare Informatics, Mater Misericordiae Hospital, Eccles Street, Dublin 7 (telephone: 01-8032000).

Higher Diploma in Healthcare (Risk Management)

MDHDP0009

Entry Requirements

The course is open to doctors, dentists, nurses, physiotherapists and radiographers with a minimum of three years' post-qualification experience and to other healthcare personnel and professionals with a basic qualification in one of the health sciences or who hold such other qualifications and have a minimum of three years' clinical or healthcare managerial experience as approved by the Medical Faculty.

Course Description and Aims

The course will provide training for clinical and managerial healthcare professionals in the area of healthcare risk management leading to the award of a postgraduate UCD Diploma. The skills learned will provide the basis for participation in healthcare management and risk management committees and for further training as a risk manager. The knowledge acquired

will be applied to the improvement of patient care, to the prevention and management of legal claims and to healthcare delivery in general.

Course Structure
The course will be part-time over one academic year and will consist of lectures and seminars of real and simulated case scenarios. It will provide teaching and training in the necessary background information in relation to the healthcare system, medico-legal aspects of healthcare, the risk management process and its application to both clinical and non-clinical patient and staff care areas. The emphasis will be on the practical application of this knowledge and training in the risk management process to the day-to-day workings of hospitals, clinics and health board institutions.

Course Content
The course will include study of the following topics:
Structure and organisation of the healthcare system, healthcare finance and personnel, the legal system, the legal framework of the healthcare provider-patient relationship, EU legislation, medical records, patient consent, medical negligence, ethical issues, medico-legal reports and court evidence, definition of risk, risk identification, risk analysis, risk management committee, risk manager, management of clinical risks (general and applied to specialities and departments), management of non-clinical risks, safety at work legislation, risk insurance and indemnity, claims investigation and management, implementation of the risk management process.

Examinations
The examination will consist of:
(1) A written examination at the conclusion of the course.
(2) Presentation of a written project allocated to each candidate during the first semester.

Application Procedure
Further details and application forms may be obtained from the Director, Division of Legal Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167235/7464)

Higher Diploma in Medicine (Dermatology)

MDHDP0005

This is a part-time postgraduate course for doctors in general practice.

Entry Regulations
Applicants must be registered medical practitioners and must have obtained their primary medical degree not less than three years before the examination for the Higher Diploma in Medicine (Dermatology).

Course Structure
The course comprises four modules: lectures, practicals, home study and clinical exposure, and will take place in Dublin teaching hospitals. Practical case demonstration and case presentation of patients seen in hospital and practice will form an important part of the course. Home study will include weekly detailed review of CME dermatology articles. Evaluation of progress will take place during the course by response to multiple choice questions. Additional clinical exposure will be arranged with five days' placement in Dermatology Departments.

Examination
A written/oral/clinical examination will be held following which successful candidates will be awarded a Higher Diploma in Medicine (Dermatology) by the National University of Ireland.

Application Procedure
Application forms may be obtained from the Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 01-7167454/7440).

Higher Diploma in Occupational Health (HDipOccH)

MDHDP0008

Entry Requirements
This course is open to registered medical practitioners. A period of not less than three years must elapse between the date on which a practitioner is fully registered and the date on which he/she becomes eligible to present for admission to the examination for the Higher Diploma. The course will not normally be held unless there are a minimum of ten suitable applicants.

Course Content & Structure
The course will be part-time over the academic terms of two consecutive years. It is designed for medical doctors who are working, or who wish to work, as medical officers in industry either full-time or part-time.

The course includes the study of the following subjects: Occupational Health, Epidemiology and Statistics, Industrial Psychiatry, Ergonomics including Industrial Psychology, Occupational Hygiene, Respiratory Medicine, Occupational Skin Disease, Occupational Cancers, Occupational Otology, Occupational Ophthalmology, Hazards in Agriculture, Accidents and Trauma, Toxicology.

Examinations
The Higher Diploma Examination will be held in the Summer of the second year with a repeat examination in the Autumn of that year.

Each candidate must present a dissertation on a topic relevant to occupational health which will embody a detailed review of the literature and/or original work on the topic.

Application Procedure
Further particulars and application forms may be obtained from the Department of Public Health Medicine and Epidemiology, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: +353 1 7167345; fax: +353 1 7167407; email: public.health@ucd.ie).

Higher Diploma in Community Ophthalmology

MDHDP0040

This is a two-year postgraduate course for Community Ophthalmologists.

Entry Requirements
Applicants must be registered medical practitioners who have undertaken at least two years hospital training in Ophthalmology in the N.C.H.D. grade.

Course Structure
The course will be offered in eight modules. Each module will involve a weekend traditional teaching programme followed by a distance learning component delivered by the Centre for Healthcare Informatics.

Examination
A written/oral examination will be held at the end of the first four modules and again on completion.

Application Procedure
Application forms may be obtained from the Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (telephone: 7167454/7440).

Diploma in Emergency Medical Technology (DipEMT)

MDDPP0002

Introduction
This course prepares candidates for the examination for the University Diploma in Emergency Medical Technology; successful candidates will also receive the National Ambulance Advisory Council's EMT-B qualification. It is offered in collaboration with the National Ambulance Training School and represents the initial component of more advanced training.

Admission Requirements
Applicants should have adequate educational qualifications to enable them to successfully undertake the work of the course; an interview board will be established to review applications and may shortlist applicants.

Applicants from within the statutory ambulance services may have completed existing general and cardiac training courses. Credit may be granted for successful completion of these courses and for a maximum of two years of full-time service to allow applicants to

complete the Diploma course with 480 hours of clinical internship (principally the distance learning component).

Course Summary
The course will consist of a seven week full-time training course, carried out at the National Ambulance Training School; and a twenty-six week clinical internship which will include supervised clinical practice, speciality rotations, tutorials and a distance learning programme.

Course Subjects

1. Introduction to the Ambulance Services: Organisation and management.
2. Health and safety at work.
3. The management of illness and injury.
4. Special clinical situations.
5. Communication skills (involving patients, co-workers, record-keeping and technical procedures).
6. Special procedures (such as major incidents).
7. Human structure and function (distance learning).
8. Supervised clinical practice (clinical internship).
9. Clinical and service attachments (A&E, CCU, theatre, other emergency services etc.).

Examinations
Continuous assessment will occur during the full-time training period, with written and OSCE examinations at the end of the course. During the clinical internship, students will be assessed on the basis of their performance in the programme and distance learning.

Application
Application should be made to the UCD Department of General Practice, Coombe Healthcare Centre, Dolphin's Barn Street, Dublin 8 (telephone: 01-4730895).

Certificates

Certificate in Healthcare Informatics

MDCTP0001

The course is designed for doctors to enable them to use computers and related technology in their practice. It will be run on a part-time basis. Students will spend one-week intensive training in the Computer Aided Learning facility followed by half-day sessions to complete the course. The one-week courses will be run outside the undergraduate semester time.

The aim of this course is to give students an understanding of information and communication technology and its importance in medicine and to develop competence in the use of a PC and standard software packages.

Entry Requirements
Applicants will normally hold the degrees of MB BCh BAO or equivalent. Other University graduates may be accepted.

Course
The course comprises an introduction to the basic concepts of IT and the PC, word processing, Networks/Internet/E-mail, Graphics/Imaging, Presentation, Databases, Spreadsheets, Expert systems/artificial intelligence/Information systems, security/law.

Examination
Examination will be by continuous assessment of practical skills and by theory. The course is oriented towards the practical application of information technology and the examination system will reflect this. In the practical examinations for each application students will be required to perform a number of tasks. The theory paper will examine students' understanding of concepts covered in the course. The Certificate may be awarded with honours.

Application Procedure
Applicants should apply directly to the Director, Centre for Healthcare Informatics, Faculty of Medicine, University College, Earlsfort Terrace, Dublin 2 (telephone: 01-7167225).

Interfaculty Courses

Degrees

Degree of Bachelor of Science (BSc)
Sports Studies Management

Degree of Master of Science

Disability Management

Psychotherapy

Rehabilitation Studies

DIPLOMAS

Higher Diploma in Social and Vocational Rehabilitation Studies

Higher Diploma in Developmental Disability Studies

Higher Diploma in Child Art Psychotherapy

Diploma in Sports Management

Certificates

Certificate in Injury Management and Fitness in Sport

Degree of Bachelor of Science (BSc) (Sports Management)

IFBDF0011

The Degree of BSc (Sports Management) is an innovative full-time three-year interfaculty degree programme which recognises the increasing significance of Sport at local, regional, national and international levels. The nature of Sport and the sports industry is changing dramatically and will be offering increasing numbers of challenging opportunities in the future. The development of management skills will be a critical part of this development and this degree programme is designed to provide students with the knowledge and skills necessary to choose a wide range of careers in the sports industry.

Admission Requirements

Entry will be by:

1. CAO designated entry. All students entering the programme should meet the matriculation standard and have achieved B3 in ordinary level mathematics in the Leaving Certificate or equivalent.
2. Matriculation on grounds of mature years
3. Holders of the Diploma in Sports Management at distinction level may be admitted to Year 2 of the programme with the approval of the Board of the Centre for Sports Studies on the recommendation of the Academic Director.

Course Structure

The course is delivered on a full-time basis over three years (six semesters). There are a total of 24 modules comprising 21 taught courses, an elective, a work placement and a dissertation.

Course Details

Year 1

1) Organisation and Policy in Sport **SMGT 1101**

This module focuses on the organisation, delivery and legislative framework of sport in Ireland and includes comparisons with other sporting nations.

2) Financial Management **SMGT 1102**

The focus of this module is on the role of accounting, auditing and financial management on the day-to-day running of sports organisations.

3) Information Technology I **SMGT 1103**

This module focuses on the basics of computing and familiarisation with computer software used in the Sports Industry.

4) Sports Management **SMGT 1104**

This module addresses the main functions of business and management activities and the manner in which they apply to the sporting industry. Subjects to be addressed include strategic planning, leadership and the theories of motivation and organisational behaviour.

5) Sports Marketing I **SMGT 1105**

With both a theoretical and practical approach, this module introduces the student to the marketing process, the business of marketing and its application to sporting events and organisations.

6) Sports Science 1 **SMGT 1106**

The student is introduced to the fundamentals of Sports Science including anatomy, biomechanics and physiology and will be provided with an underlying knowledge of the movement of the human body.

7) Sociology of Sport **SMGT 1107**

This module identifies the role of sport in present-day culture and will investigate the socio-economic aspects of modern sport and recreation. Consideration will be given to the history of Sport and to sociological, ethical and drugs-related issues in Sport.

8) Coaching **SMGT 1108**

Students are introduced to the principles of coaching and will obtain NCTC Level 1 coaching certification in an appropriate sport.

Year 2

9) Legislation of Sport **SMGT 2101**

This module explores the relationship between Sport and the Law. It will focus on the aspects of legislation which relate to the world of sport, including the legal responsibilities of those involved in the management of sport.

10) Sporting Facility Management 1 **SMGT 2102**

This module focuses on the management of both indoor and outdoor sports facilities. Consideration will be given to the design, construction and organisation of such facilities as well as to the practical aspects of their management.

11) Event Management **SMGT 2103**

The module examines the requirements of managing sporting events from both a practical and theoretical perspective. Topics to be addressed include bidding, planning, organisation, resource allocation, staffing, logistics and marketing of local, national and international events.

12) Sports Marketing 2 **SMGT 2104**

This module develops concepts introduced in the Sports Marketing 1 Module. Particular focus will be given to the area of sports sponsorship.

13) *Sports Tourism* **SMGT 2105**
This module considers the development, scope and social and economic importance of the travel and tourism industry and examines its relationship to the sports industry in Ireland.

14) *Research Methodology* **SMGT 2106**
This module provides an overview of project design and organisation, and of the different methods of data acquisition, analysis and presentation available to the sports industry.

15) *Sports Science 2* **SMGT 2107**
Building upon some of the concepts encountered in the Sports Science 1 Module, this module provides the foundation for an understanding of nutrition, exercise physiology and training and of the concepts and application of sports psychology.

16) *Elective* **SMGT 2108**
Students undertake an elective in one of a number of topic areas which permits them to develop a greater understanding of that particular sector of the sports industry.

17) *Work Placement* **SMGT 2109**
Students undertake a three-month work placement within the sports industry.

Year 3

18) *Human Resources Management* **SMGT 3101**
This module addresses the management skills that are necessary for successful personnel and organisation management within the sports and recreation industry and focuses on relevant industrial relations and human resource issues.

19) *Facility Management 2* **SMGT 3102**
This module develops and expands issues raised in the Sports Facility Management 1 Module, dealing with both indoor and outdoor facilities.

20) *Enterprise and Development* **SMGT 3103**
This module focuses on the establishment of business in the corporate world. It provides an insight into effective management skills, issues in personal development, as well as innovation and new ventures in the sports industry.

21) *Health and Safety Management* **SMGT 3104**
This module is an introduction to a range of issues relating to health and safety in the workplace with particular reference to the sports industry.

22) *Sports Science 3* **SMGT 3105**
This module builds on the previous Sports Science modules and deals with exercise prescription, occupational first aid and looks at the basics of Sports Injuries Management.

23) Communications and Media in Sport **SMGT 3106**

This module investigates how the print, radio and television media have influenced the development of sport and examines the effect of the corporate world on the business of sport. Students gain an understanding of the value of effective public relations and of the practical skills involved.

24) Dissertation **SMGT 3107**

Students produce a dissertation of approximately 10,000-15,000 words on a topic in the student's area of choice selected in consultation with the Academic Director.

Assessment

Students are assessed by means of written assignments, examination papers and a minor dissertation based on individual research projects.

Degree of Master of Science (Disability Management) (MSc)

IFMRP0001

The MSc (Disability Management) is an interfaculty programme designed to assist rehabilitation professionals to develop a specialisation and expertise in areas crucial to the economic and social integration of people with disabilities. Candidates for admission to the course must have obtained an Honours Higher Diploma in Social and Vocational Rehabilitation, or an equivalent grade in a similar postgraduate diploma in another university.

Entry Requirements
Entry to the programme is subject to:

(a) submission of a dissertation proposal supported by an academic supervisor who has been approved by UCD; and

(b) acceptance by the Academic Council.

Candidates will not usually be full-time students.

Course Programme
The MSc is heavily research driven and focuses on a broad range of multidisciplinary issues which impact on disability policy and in society.

The programme includes:
1. Introduction to research practice.
2. Seminars in specific areas relevant to the field including:
   Legislation and Policy, Disability Management, Disability Awareness.
3. Supervision of introductory proposal(s) by students and the requirement to present a significant paper on this to the candidate group and others.
4. Where candidates do not have enough practical experience in the area, there will be a requirement to complete an internship with a recognised and accredited service provider in an area appropriate to their dissertation.
5. Dissertations will focus on the requirement to develop better management practice in the field and therefore, of necessity, will involve the application of new technology, organisational structures and approaches to human resource management. A dissertation could also include the development of small or medium sized enterprises which are regarded as an important current strategy in the field of vocational integration of people with disabilities.

Application Procedure
Further details and application forms may be obtained from:

The Director, MSc (Disability Management),
Graduate School of Business, University College Dublin
Blackrock, Co Dublin

Degree of Master of Science (Psychotherapy) (MSc)

IFMXF0002

This is an inter-faculty Master's Degree in Psychotherapy.

Course Description
The MSc (Psychotherapy) is a two year course consisting of lectures, exercises in personal Psychotherapy and the supervised practice of Psychotherapy. The lectures and exercises may extend outside the usual lecture terms. Due progress in all areas must be made throughout the course. There will be a final written and oral examination. Candidates will also be required to present a project of 5,000-10,000 words on a topic in Psychotherapy. The final degree examination will be held in the Autumn of the second year.

Admission Requirements
Applicants must hold an honours primary degree in a relevant area or its equivalent and have relevant experience.

Admission Procedure
Application forms and further information may be obtained from either the Director of the School of Psychotherapy, St Vincent's Hospital, Elm Park, Dublin 4 (telephone: 01-209 4577) or the Director of Family Therapy Training, Department of Child and Family Psychiatry, Mater Misericordiae Hospital, North Circular Road, Dublin 7.

Completed application forms should be returned to the relevant Director on or before 1 April in the year in which a course starts. At present the course begins only in years of even number.

Shortlisted candidates will be interviewed for suitability for psychotherapy training.

Master of Science in Rehabilitation Studies MSc

IFMXP0009

This course is a two-year part-time programme of study leading to the award of an MSc (Rehabilitation Studies). The programme is comprised of both theoretical and practical elements and aims to impart the core knowledge, skills and attitudes required for the effective delivery of rehabilitation services within the community.

Course Structure and Syllabus
The course is as follows:
1. Rehabilitation Management
2. Disability Awareness/Learning & Development
3. Legislation and Policy
4. Contours of Employment
5. Research Course
6. Inter personal Skills
7. Rehabilitation Practice 1
8. Rehabilitation Practice 2

Examination Regulations
Students are assessed by means of written assignments, placement portfolio, examination papers and a minor thesis based on an individual empirical research project.

Entry Requirements
The course is open to graduates working in all areas of rehabilitation and to recent graduates with an honours degree in a relevant area. Students of the Higher Diploma in Social and Vocational Rehabilitation, who achieve high honours in the first year of the Diploma, can apply to be upgraded to the Masters programme in the second year. Where it is appropriate, the results of the test of English as a Foreign Language (TOEFL) will be considered in the application procedure.

Application Procedure
For additional information and application forms please contact: Rehabilitation Studies, UCD, Blackrock Campus, Carysfort Avenue, Blackrock, Co Dublin. Telephone: (01) 7168865, Fax: (01) 2831911, E-mail: Socyocre@ucd.ie

Higher Diploma in Developmental Disability Studies[*]

IFHDP0016

This part-time postgraduate diploma will be presented in the Centre for the Study of Developmental Disabilities. The course will be held over one year. Successful students will be awarded a Higher Diploma of the National University of Ireland under the auspices of the Faculties of Medicine, Commerce, Engineering and Architecture, Philosophy and Sociology.

Aim of the Course

This multi-disciplinary course is intended for graduate professionals who are members of the modern clinical team working to support people with learning disability, their families and other carers, and for professionals who may in the future work with people with learning disabilities. The course is intended to empower professionals to be, in their daily work, leaders towards the goal of inclusion and independence for individuals with learning disability. The course will take a multi-disciplinary life-span approach to the clinical support needs of people with learning disability.

Entry Requirements

Applicants must hold a primary degree or equivalent in one of the following disciplines: Medicine, Nursing, Physiotherapy, Clinical Engineering, Education, Nutrition, Occupational Therapy, Psychology, Social Work and Speech Therapy. Before admission to the programme, candidates will be expected to show, at interview, an interest in and an understanding of the needs of people with learning disability and an openness to the ideals of independence and inclusion for people with learning disability.

Course

The course subjects will cover the following areas:

1. Lifespan Development Issues
2. Philosophies and Models of Care and Support
3. Legislation and Policy
4. Teamwork and Partnership
5. Assistive Technology
6. Research Practice and Utilisation
7. Secondary Handicap

Examination

Each area will be examined individually by end-of-year written examinations. There will also be term project assignments and a specialisation project (to include oral examination).

Application Procedure

Details and application forms are available from the Centre for Developmental Disabilities, Roebuck Castle, UCD, Belfield, Dublin 4 (telephone: 01-7168702).

[*] The term *Learning Disability* is used to refer to the disability previously known as Mental Handicap.

Higher Diploma in Social and Vocational Rehabilitation Studies

IFHDF0009

The Higher Diploma in Social and Vocational Rehabilitation aims to provide for those working in all areas of Social and Vocational Rehabilitation, and for others who may wish to make a career in the field, a thorough professional understanding and experience of the range and scope of organised activity in the sector. The programme is designed to enhance the skills and knowledge of those in professional, executive and administrative positions in order to provide a continually improving service to the community.

Course Programme
The programme is offered on a two-year part-time basis. Schedules are designed to facilitate participants with work commitments.

The programme combines academic coursework with practical projects which are designed to develop and enhance skills in a wide range of relevant areas including:

- Rehabilitation Management
- Rehabilitation Practice
- Disability Awareness
- Learning and Development
- Research
- Legislation and Policy
- Contours of Employment
- Interpersonal Skills

Entry Requirements
Prospective candidates are required to hold an honours primary degree or relevant professional qualification. Applicants without these academic or professional qualifications but who have significant work experience in the field may be considered following an interview process.

Students who obtain a sufficiently high standard in the Higher Diploma may proceed to a further course of study at Masters level.

Application Procedure
Further details and application forms may be obtained from:

The Course Director, Rehabilitation Studies Programme, UCD, Blackrock Campus, Carysfort Avenue, Blackrock, Co Dublin. Tel 01 7168865 Fax: 01 2831911. Email: Socvocre@ucd.ie

Higher Diploma in Child Art Psychotherapy

IFHDP0013

The Postgraduate Diploma in Visual Psychotherapy is a two year, part-time course designed for professionals already in possession of a core training, who wish to specialise in using images in a psychotherapeutic context to understand the inner world of the child.

Course Syllabus
Menu of courses in each year of study:

- Child Art Psychotherapy Training Groups
- Theory and Practice of Psychotherapy and Child Art Psychotherapy
- Seminars in Theory of Pictorial Thinking
- Clinical Theory (Child Development, Psychotherapy, and Clinical Approaches in Child Mental Health)
- Research
- Clinical Practice
- Supervision

Course Content

Unit 1: Child Art Psychotherapy Training Groups

Unit 2: Theory and Practice of Psychotherapy and Child Art Psychotherapy (Lectures/Seminars/Case Presentations)

Unit 3: Theory of Pictorial Thinking (Seminars)

Unit 4: Clinical Theory
a. Psychop athology
b. Child Development
c. Clinical Approaches in Child Mental Health

Unit 5: Research

Unit 6: Clinical Practice

Supervision
Regular supervision will be provided by a senior member of the clinical team to support the trainee in his/her ongoing clinical work. On alternative weeks, the trainee will receive supervision from a course tutor with reference to issues of developing therapeutic skills in Child Art Psychotherapy. There will be weekly case presentations by all trainees for the group, with supervision given by the course leader and other senior members of the multidisciplinary teams.

Units 1 and 6 commence at the start of the course and are ongoing for its duration.

Units 2, 3, 4 and 5 are taught sequentially over the two-year period as self-contained study units of limited duration.

Course Structure and Examination Regulations
This two-year part-time course will involve 150 hours per year of theory and 150 hours per week of clinical practice, which includes Child Art Psychotherapy training and supervision.

Assessment
Assessment will consist of six parts: an ongoing observation of the student's progress on the course as well as five written pieces of work. The first one is a long case study of about 8000-10,000 words, to be submitted by the end of the first year. The second one is a special study of about 8000-10,000 words on a theoretical issue which has arisen from the student's clinical practice, together with the third one, a research protocol of about 1500-5000 words, both to be finished by the end of the second academic year. Finally, at the end of the second year there will be two two-hour examination papers to be sat. The examination will test the candidate's knowledge of basic concepts of Child Psychiatry and Child Psychology which would be relevant in the assessment of a patient's suitability for Child Art Psychotherapy, followed by an oral examination (viva voce) as part of the externally moderated assessment for the award of the Diploma.

Application Procedure
Contact name and address for further information

The Director,
Department of Child and Family Psychiatry,
Mater Misericordiae Hospital
Dublin 7.
Telephone: 01 803 4793.

Diploma in Sports Management

IFDPP0005

This is an inter-faculty, two year, part-time undergraduate course leading to a Diploma in Sports Management. The course relates to the principles of organisation, management and administration of modern sport and the leisure industry.

Aim of the Course
The aim of the course is to equip the student with a comprehensive knowledge of sports management in all its facets, with particular emphasis on the continuing expansion of this multi-disciplinary activity.

Entry Qualifications
Matriculation standard or its equivalent together with a background in sport which would typically be a top level competitor, an administrator in a sporting organisation or a manager/employee in the leisure industry. Interviews may be held to assess applicants and their aptitude for pursuing the course.

Course
The course will comprise eight taught modules of 36 hours each. There will be four modules in Year 1 and four modules in Year 2. There will also be practical work and field activities.

Module 1 Organisation and Policy in Sport.
Module 2 Financial Management
Module 3 Information Technology
Module 4 Management of Services Organisations.
Module 5 Sociology of Sport.
Module 6 Applied Biology of Sport and Exercise.
Module 7 Sports Marketing.
Module 8 Event and Facility Management.

Examination
There is a written and oral examination (where appropriate) in each module at the end of a semester or at the end of each year. in addition, there will be a dissertation and an oral examination at the end of the course.

Candidates must pass the examination in the four modules taught in Year 1 before commencing Year 2. Repeat examinations, if required, will be held in the autumn.

Application Procedure
Further particulars and application forms may be obtained from :

Continuing Professional Education Office
University Industry Programme, University College Dublin
Belfield, Dublin 4. (Telephone: 01-7167893/8712)

Certificate in Injury Management and Fitness in Sport

IFCTP0005

The aim of this course is to provide participants with a thorough broad-based knowledge in areas relevant to understanding how the body functions during exercise and how to help athletes to prepare for exercise and recover from injury. The course is ideal for people with no formal medical training or experience who have an interest in sports medicine.

Requirements
A good level of secondary education.

Course Description
Lectures and tutorials will take place one evening per week for 24 weeks during the academic year. Each session will comprise two lectures and a tutorial. Prepared notes will be available at all sessions.

Course Content
The syllabus will cover the following topics:
Exercise Physiology – the way the body functions in exercise.
Human Anatomy – the major bones, joints, muscles, ligaments, tendons, nerves, blood vessels and organs of the body.
Human Biomechanics – the way we walk, run and perform specific sports techniques; how biomechanics can contribute to injury.
Injury Prevention – warm-up, stretching, proper rehabilitation of previous injuries, protective equipment etc.
Musculoskeletal Injuries – the common injuries of bones and soft tissue; the RICE regime.
Medical Conditions and Emergencies – cardiopulmonary resuscitation, neck injuries, swallowing of the tongue, major trauma, medical conditions (asthma, diabetes etc.).
First Aid Techniques – wounds, strapping, RICE, splints, patient transport; the first aid kit.
Introducing the Physiotherapist- the role of the Physiotherapist.
Looking after Yourself – lifting techniques, organising medical cover at events, protection against infection, legal considerations.
Specific Sports – the specific demands and injuries of different sports.
Sports Nutrition – guidelines for dietary requirements of athletes.
Sport Psychology – an introduction to psychological aspects of performance and injury.

Examination
There will be a multiple choice type paper at the end of each term (three terms). The end-of-year examination will comprise a written paper and a practical/oral assessment.

Application Procedure
Further particulars and application form may be obtained from the University Industry Programme, UCD, Belfield, Dublin 4 (telephone: 01-7167893/8712).